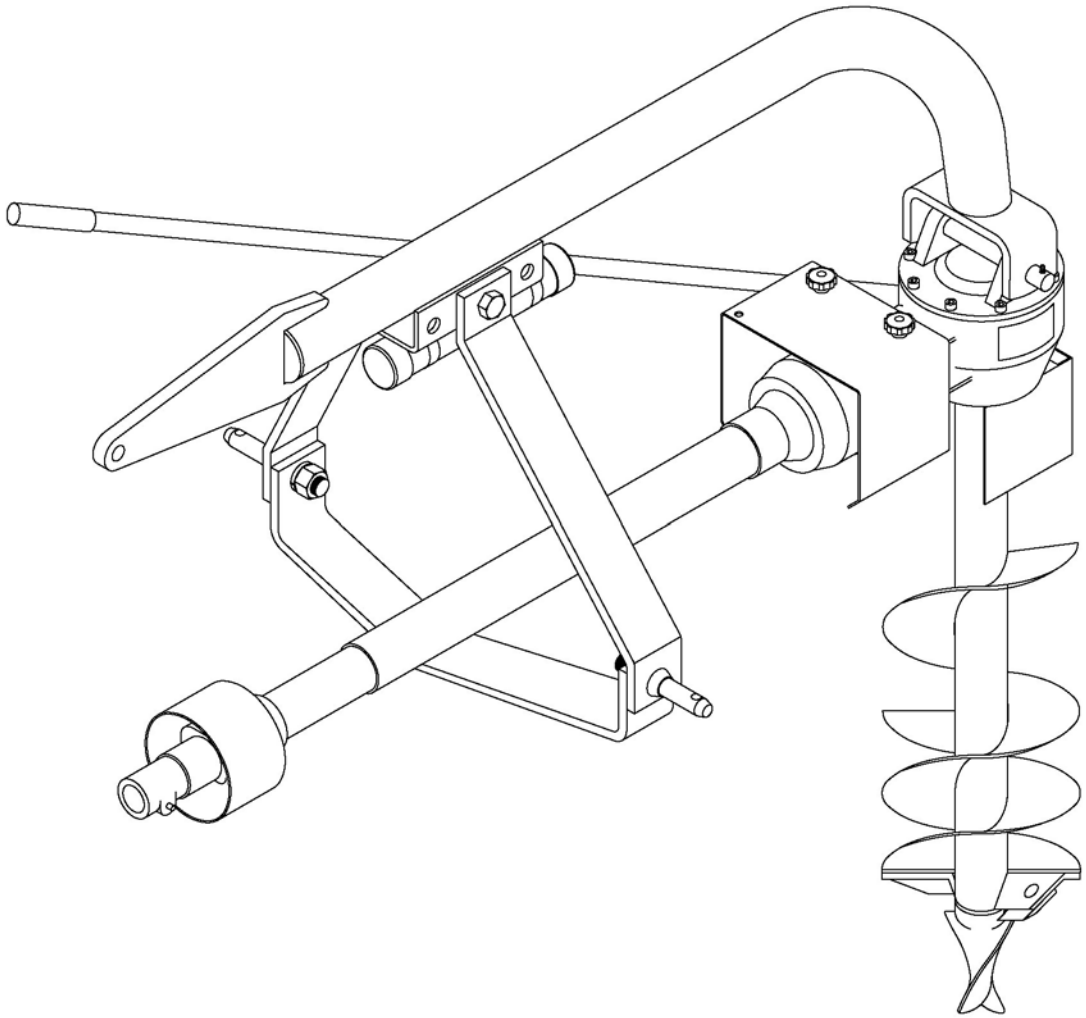
WOODS

POST HOLE DIGGER

PHD25

General Purpose 3-Point Mounted

For 15 - 25 hp Tractors
with a Category I or Category 0 Hitch



OPERATOR'S MANUAL

WOODS®
Tested. Proven. Unbeatable.

MAN0290
(Rev. 6/16/2006)

TO THE DEALER:

Assembly and proper installation of this product is the responsibility of the Woods® dealer. Read manual instructions and safety rules. Make sure all items on the Dealer's Pre-Delivery and Delivery Check Lists in the Operator's Manual are completed before releasing equipment to the owner.

The dealer must complete the Product Registration included with the Operator's Manual. The customer must sign the registration which certifies that all Dealer Check List items have been completed. The dealer is to return the prepaid postage portion to Woods, give one copy to the customer, and retain one copy. **Failure to complete and return this card does not diminish customer's warranty rights.**

TO THE OWNER:

Read this manual before operating your Woods equipment. The information presented will prepare you to do a better and safer job. Keep this manual handy for ready reference. Require all operators to read this manual carefully and become acquainted with all adjustment and operating procedures before attempting to operate. Replacement manuals can be obtained from your dealer. To locate your nearest dealer, check the Dealer Locator at www.WoodsEquipment.com, or in the United States and Canada call 1-800-319-6637.

The equipment you have purchased has been carefully engineered and manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require cleaning and upkeep. Lubricate the unit as specified. Observe all safety information in this manual and safety decals on the equipment.

For service, your authorized Woods dealer has trained mechanics, genuine Woods service parts, and the necessary tools and equipment to handle all your needs.

Use only genuine Woods service parts. Substitute parts will void the warranty and may not meet standards required for safe and satisfactory operation. Record the model number and serial number of your equipment in the spaces provided:

Model: _____ **Date of Purchase:** _____

Serial Number: (see Safety Decal section for location) _____

Provide this information to your dealer to obtain correct repair parts.

Throughout this manual, the term **IMPORTANT** is used to indicate that failure to observe can cause damage to equipment. The terms **CAUTION, WARNING,** and **DANGER** are used in conjunction with the Safety-Alert Symbol (a triangle with an exclamation mark) to indicate the degree of hazard for items of personal safety.

⚠	This Safety-Alert Symbol indicates a hazard and means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!
⚠ **DANGER**	Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.
⚠ **WARNING**	Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed.
⚠ **CAUTION**	Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.
IMPORTANT	Indicates that failure to observe can cause damage to equipment.
NOTE	Indicates helpful information.

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SPECIFICATIONS

3-Point Hitch	Category I (standard), Category 0 (optional)
Tractor Horsepower	15 - 25 hp
Tractor PTO	540 rpm
Approximate Weight	152 lbs
Driveline Protection	5/16 x 2-1/2" GR2 shear bolt
Auger Length	30 inches (recommended)
Auger Diameter	6 inch, 9 inch, 12 inch
Auger Points	Cast ductile iron, fish tail point, replaceable
Cutting Teeth	Alloy steel, hard surfaced, replacable

GENERAL INFORMATION

⚠ WARNING

■ **Some illustrations in this manual show the digger with safety shields removed to provide a better view. The digger should never be operated with any safety shielding removed.**

The purpose of this manual is to assist you in operating and maintaining your post hole digger. Read it carefully. It furnishes information and instructions that will help you achieve years of dependable performance. These instructions have been compiled from extensive field experience and engineering data. Some information may be general in nature due to unknown and varying operating conditions. However, through experience and these instructions, you should be able to develop procedures suitable to your particular situation.

The illustrations and data used in this manual were current at the time of printing but, due to possible inline production changes, your machine may vary slightly in detail. We reserve the right to redesign and change the machines as may be necessary without notification.

Throughout this manual, references are made to right and left direction These are determined by standing behind the equipment facing the direction of forward travel.

SAFETY RULES

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by an operator's single careless act.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, judgement, and proper training of personnel involved in the operation, transport, maintenance, and storage of equipment.

It has been said, "The best safety device is an informed, careful operator." We ask you to be that kind of operator.

¡LEA EL INSTRUCTIVO!

Si no lee Ingles, pida ayuda a alguien que si lo lea para que le traduzca las medidas de seguridad.

TRAINING

■ **Safety instructions are important! Read all attachment and power unit manuals; follow all safety rules and safety decal information. (Replacement manuals and safety decals are available from your dealer. To locate your nearest dealer, check the Dealer Locator at www.WoodsEquipment.com, or in the United States and Canada call 1-800-319-6637.) Failure to follow instructions or safety rules can result in serious injury or death.**

■ **If you do not understand any part of this manual and need assistance, see your dealer.**

■ **Know your controls and how to stop engine and attachment quickly in an emergency.**

■ **Operators must be instructed in and be capable of the safe operation of the equipment, its attachments, and all controls. Do not allow anyone to operate this equipment without proper instructions.**

■ **Keep hands and body away from pressurized lines. Use paper or cardboard, not hands or other body parts to check for leaks. Wear safety goggles. Hydraulic fluid under pressure can easily penetrate skin and will cause serious injury or death.**

■ **Make sure that all operating and service personnel know that if hydraulic fluid penetrates skin, it must be surgically removed as soon as possible by a doctor familiar with this form of injury or gangrene, serious injury, or death will result. CONTACT A PHYSICIAN IMMEDIATELY IF FLUID ENTERS SKIN OR EYES. DO NOT DELAY.**

■ **Never allow children or untrained persons to operate equipment.**

PREPARATION

■ **Check that all hardware is properly installed. Always tighten to torque chart specifications unless instructed otherwise in this manual.**

■ **Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.**

■ **Make sure attachment is properly secured, adjusted, and in good operating condition.**

■ **Make sure spring-activated locking pin or collar slides freely and is seated firmly in tractor PTO spline groove.**

■ **Power unit must be equipped with ROPS or ROPS cab and seat belt. Keep seat belt securely fastened. Falling off power unit can result in death from being run over or crushed. Keep foldable ROPS system in "locked up" position at all times.**

■ **Make sure all safety decals are installed. Replace if damaged. (See Safety Decals section for location.)**

■ **Make sure shields and guards are properly installed and in good condition. Replace if damaged.**

■ **Keep unit from swinging side-to-side by using stabilizer bars, adjustable sway chains, or sway blocks on tractor lift arms. Adjust tightly for best results.**

OPERATION

■ **Do not allow bystanders in the area when operating, attaching, removing, assembling, or servicing equipment.**

■ **Consult local utilities before digging. Know location and depth of all underground cables, pipelines, and other hazards in working area and avoid contact.**

■ **Do not put digger into service unless auger point and all cutting edges are intact and in good repair.**

SAFETY RULES

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

■ **Do not put digger into service unless all shields and guards are in place and in good condition. Replace if damaged.**

■ **Keep bystanders away from equipment.**

■ **Do not operate or transport equipment while under the influence of alcohol or drugs.**

■ **Operate only in daylight or good artificial light.**

■ **Never aim auger point with hands on auger, gearbox or boom. To place auger point use skid steer arms.**

■ **Keep hands, feet, hair, and clothing away from equipment while engine is running. Stay clear of all moving parts.**

■ **Always comply with all state and local lighting and marking requirements.**

■ **Never allow riders on power unit or attachment.**

■ **Power unit must be equipped with ROPS or ROPS cab and seat belt. Keep seat belt securely fastened. Falling off power unit can result in death from being run over or crushed. Keep foldable ROPS system in "locked up" position at all times.**

■ **Always sit in power unit seat when operating controls or starting engine. Securely fasten seat belt, place transmission in neutral, engage brake, and ensure all other controls are disengaged before starting power unit engine.**

■ **When digging holes, always sit in operator seat.**

■ **To reduce rapid U-joint wear and driveline failure, never lift auger over 12" from ground when PTO is running.**

■ **Shift tractor transmission into park or neutral and set brakes before engaging PTO and digging.**

■ **Keep digger under control by running PTO at slowest speed possible (no faster than half-throttle in 540 rpm range).**

■ **Look down and to the rear and make sure area is clear before operating in reverse.**

■ **Use extreme care when working close to fences, ditches, other obstructions, or on hillsides.**

■ **Do not operate or transport on steep slopes.**

■ **When digging in rough ground or hilly terrain, place digger uphill from tractor. If digger is downhill, tractor could tip when pulling auger from hole.**

■ **Do not stop, start, or change directions suddenly on slopes.**

■ **Use extreme care and reduce ground speed on slopes and rough terrain.**

■ **When dislodging a stuck auger, disengage PTO, stop engine, remove key, disconnect PTO from tractor, and turn auger backwards with a wrench. Remove and store wrench before starting engine.**

■ **Before performing any service or maintenance, lower digger to ground or block securely, turn off tractor engine, remove key, and disconnect driveline from tractor PTO.**

■ **Never leave a running machine unattended.**

■ **Before leaving tractor seat, stop PTO, set brake, shut off engine, remove key, and let auger come to a full stop.**

MAINTENANCE

■ **Before performing any service or maintenance, lower digger to ground or block securely, turn off tractor engine, remove key, and disconnect driveline from tractor PTO.**

■ **Never go underneath equipment (lowered to the ground or raised) unless it is properly blocked and secured. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak down, hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death.**

■ **Service and maintenance work not covered in OWNER SERVICE must be done by a qualified dealership. Special skills, tools, and safety procedures may be required. Failure to follow these instructions can result in serious injury or death.**

■ **When dislodging a stuck auger, disengage PTO, stop engine, remove key, disconnect PTO from tractor, and turn auger backwards with a wrench. Remove and store wrench before starting engine.**

■ **Use a suitable lifting device of sufficient capacity. Use adequate personnel to handle heavy components.**

■ **Do not modify or alter or permit anyone else to modify or alter the equipment or any of its components in any way.**

(Safety Rules continued on next page)

SAFETY RULES

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

(Safety Rules continued from previous page)

- **Never replace shear bolt or auger retaining bolt with a different length, or grade. Always use a grade 2 bolt as a replacement.**
- **Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate**
- **Do not allow bystanders in the area when operating, attaching, removing, assembling, or servicing equipment.**
- **Make sure attachment is properly secured, adjusted, and in good operating condition.**
- **Never perform service or maintenance with engine running.**
- **Keep all persons away from operator control area while performing adjustments, service, or maintenance.**
- **Tighten all bolts, nuts, and screws to torque chart specifications. Check that all cotter pins are installed securely to ensure equipment is in a safe condition before putting unit into service.**
- **Make sure all safety decals are installed. Replace if damaged. (See Safety Decals section for location.)**
- **Make sure shields and guards are properly installed and in good condition. Replace if damaged.**
- **When lubricating telescoping PTO drives, keep fingers out of shield access slots to prevent injury.**

TRANSPORTATION

- **Always comply with all state and local lighting and marking requirements.**
- **Never allow riders on power unit or attachment.**
- **Power unit must be equipped with ROPS or ROPS cab and seat belt. Keep seat belt securely fastened. Falling off power unit can result in death from being run over or crushed. Keep foldable ROPS system in "locked up" position at all times.**
- **Do not operate PTO during transport.**
- **Do not operate auxiliary hydraulics during transport.**
- **Look down and to the rear and make sure area is clear before operating in reverse.**
- **Do not stop, start, or change directions suddenly on slopes.**
- **Use extreme care and reduce ground speed on slopes and rough terrain.**
- **Use additional caution and reduce speed when under adverse surface conditions, turning, or on inclines.**
- **Do not operate or transport on steep slopes.**
- **Do not operate or transport equipment while under the influence of alcohol or drugs.**
- **A minimum 20% of tractor and equipment weight must be on the tractor front wheels when attachments are in transport position. Without this weight, tractor could tip over, causing personal injury or death. The weight may be attained with a loader, front wheel weights, ballast in tires or front tractor weights. Weigh the tractor and equipment. Do not estimate.**
- **Raise unit as high as possible for transport.**
- **Reduce transport speed to avoid bouncing and brief loss of steering control.**

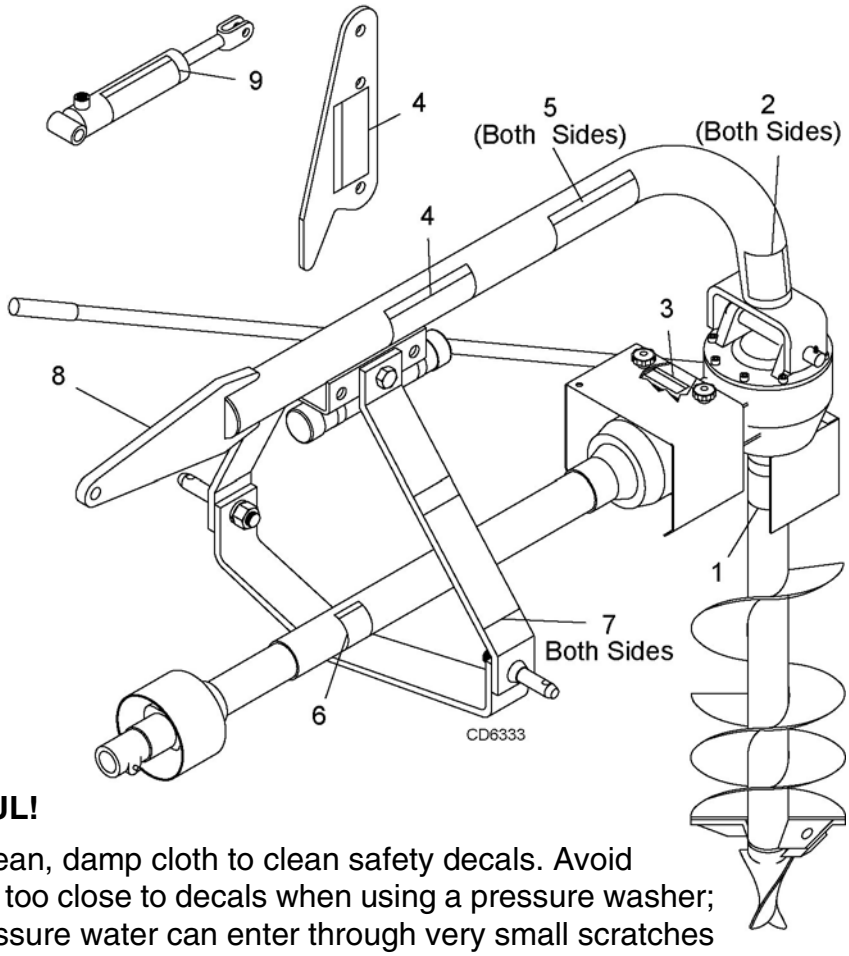
STORAGE

- **Block equipment securely for storage.**
- **Keep children and bystanders away from storage area.**
- **Do not climb or lean on equipment stored on stand.**

SAFETY & INSTRUCTIONAL DECALS

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

Replace Immediately If Damaged!



BE CAREFUL!

Use a clean, damp cloth to clean safety decals. Avoid spraying too close to decals when using a pressure washer; high-pressure water can enter through very small scratches or under edges of decals causing them to peel or come off. Replacement safety decals can be ordered free from your Woods

10 - PN 33347
(Not shown) Located under PTO shield

7 - PN 1002941

WARNING

CRUSHING AND PINCHING HAZARD

- **Be extremely careful handling various parts of the machine. They are heavy and hands, fingers, feet, and other body parts could be crushed or pinched between tractor and implement.**
- **Operate tractor controls from tractor seat only.**
- **Do not stand between tractor and implement when tractor is in gear.**
- **Make sure parking brake is engaged before going between tractor and implement.**
- **Stand clear of machine while in operation or when it is being raised or lowered.**

FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH.

1002941-A

WARNING

HIGH-PRESSURE HYDRAULIC OIL LEAKS CAN PENETRATE SKIN RESULTING IN SERIOUS INJURY, GANGRENE OR DEATH.

- Check for leaks with cardboard; never use hand.
- Before loosening fittings: lower load, release pressure, and be sure oil is cool.
- Consult physician immediately if skin penetration occurs.

9 - PN 19924

WARNING

TO AVOID SERIOUS INJURY OR DEATH:

- **Read Operator's Manual before operating, servicing, or repairing equipment. Follow all safety rules and instructions. (Manuals are available from dealer or call 1-800-319-6637.)**
- **Operate from tractor seat only.**
- **Never allow children or untrained persons to operate equipment.**
- **Lower equipment to ground, stop engine, remove key, and set brake before dismounting tractor.**
- **Never allow riders.**
- **Keep bystanders away from equipment during operation.**
- **Keep all shields in place and in good condition.**

FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.

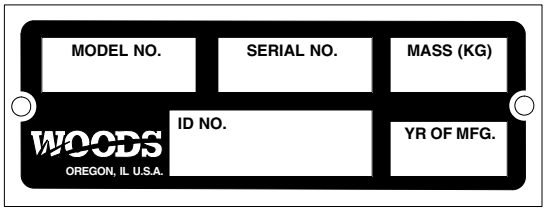
1009330

4 - PN 1009330

SAFETY & INSTRUCTIONAL DECALS

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

Replace Immediately If Damaged!



8 - SERIAL NUMBER PLATE

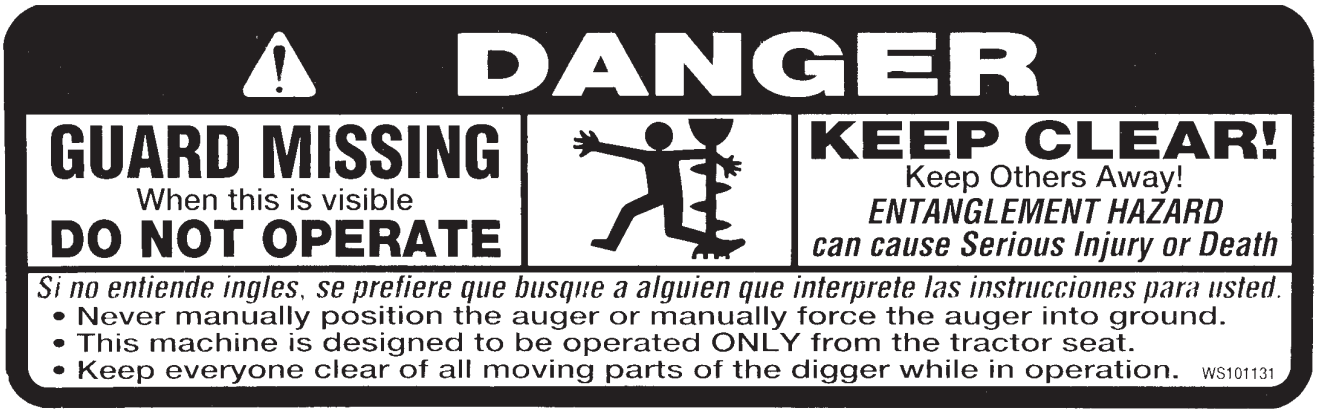
3 - PN 18869

6 - PN 18864

DANGER
ROTATING DRIVELINE
CONTACT CAN CAUSE DEATH
KEEP AWAY!
DO NOT OPERATE WITHOUT -
All driveline guards, tractor and equipment shields in place
Drivelines securely attached at both ends
Driveline guards that turn freely on driveline
18864-C

2 - PN 1009337

DANGER
KEEP CLEAR!
ENTANGLEMENT CAN CAUSE SERIOUS BODILY INJURY OR DEATH.
OPERATOR MUST ALWAYS STAY ON TRACTOR SEAT.
NEVER OPERATE IF ANYONE IS WITHIN TWENTY-FIVE (25) FEET OF AUGER.
NEVER REPLACE SHEARBOLT OR AUGER ATTACHING BOLTS WITH LONGER BOLT.
NEVER ATTEMPT TO HANG ON THE DIGGER TO FORCE IT INTO GROUND-SEVERE INJURY OR DEATH COULD OCCUR.
101032


DANGER
GUARD MISSING
When this is visible
DO NOT OPERATE
KEEP CLEAR!
Keep Others Away!
ENTANGLEMENT HAZARD
can cause Serious Injury or Death
Si no entiende ingles, se prefiere que busque a alguien que interprete las instrucciones para usted.
• Never manually position the auger or manually force the auger into ground.
• This machine is designed to be operated ONLY from the tractor seat.
• Keep everyone clear of all moving parts of the digger while in operation.
WS101131

1 - PN 1009331

5 - PN 1009332

DANGER DANGER DANGER
Rotating Parts Hazard
Keep Away
To Prevent Serious Injury or Death from Rotating Parts:
Si no entiende ingles, se prefiere que busque a alguien que interprete las instrucciones para usted.
• Read and understand owner's manual before operating.
• Do not operate without all shields and guards in place.
• Do not use body weight to force the auger into the ground or to locate auger point when auger is turning.
• Keep away from auger, cutting head and driveline when engine is running.
• Never replace shearbolt or auger attaching bolts with longer bolt.
WS101130

OPERATION

The operator is responsible for the safe operation of the equipment. The operator must be properly trained. Operators should be familiar with the equipment, the tractor, and all safety practices before starting operation. Read the safety rules and safety decals on page 4 to page 8.

Post hole diggers are designed for one-man operation. You must always dig holes while sitting in the tractor seat. **It is the responsibility of the operator to see that no one else is within twenty-five feet (25') of the digger when it is operating.** Accidents have occurred when more than one person is in the immediate area of the operating equipment. Be sure no one else is near you when you operate this product.

⚠ DANGER

■ **Do not put digger into service unless all shields and guards are in place and in good condition. Replace if damaged.**

⚠ WARNING

■ **Never aim auger point using hands on auger, gearbox, boom, or driveline. Use 3-point and handle to place auger point.**

■ **Do not shovel dirt away from a running auger. The shovel could be caught and thrown by auger.**

■ **Consult local utilities before working. Know location of all underground cables, pipelines, overhead wires, and other hazards in working area and avoid contact.**

■ **When dislodging a stuck auger, disengage PTO, stop engine, remove key, disconnect PTO from tractor, and turn auger backwards with a wrench. Remove and store wrench before starting engine.**

■ **Keep hands, feet, hair, and clothing away from equipment while engine is running. Stay clear of all moving parts.**

■ **Keep hands and body away from pressurized lines. Use paper or cardboard, not hands or other body parts to check for leaks. Wear safety goggles. Hydraulic fluid under pressure can easily penetrate skin and will cause serious injury or death.**

■ **Make sure that all operating and service personnel know that if hydraulic fluid penetrates skin, it must be surgically removed as soon as possible by a doctor familiar with this form of injury or gangrene, serious injury, or death will result. CONTACT A PHYSICIAN IMMEDIATELY IF FLUID ENTERS SKIN OR EYES. DO NOT DELAY.**

⚠ WARNING

■ **Do not put digger into service unless auger point and all cutting edges are intact and in good repair.**

■ **Keep bystanders away from equipment.**

■ **Shift tractor transmission into park or neutral and set brakes before engaging PTO and digging.**

■ **Keep digger under control by running PTO at slowest speed possible (no faster than half-throttle in 540 RPM range).**

⚠ CAUTION

■ **Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.**

■ **Tighten all bolts, nuts, and screws to torque chart specifications. Check that all cotter pins are installed securely to ensure equipment is in a safe condition before putting unit into service.**

■ **When digging holes, always sit in operator seat.**

IMPORTANT

■ **Never exceed the recommended auger capacity of the post hole digger. The model PHD25 light-duty digger is designed for use with augers up to 12-inch diameter. Use of an incorrect auger or auger extension can cause equipment damage, loss of operator control and personal injury.**

PREPARATION

Thoroughly read and understand your Operator's Manuals.

Before beginning operation, clear area of objects that wrap around the auger or might be thrown.

Contact local utility company to make certain there are no buried gas lines, electrical cables, etc., in the work area.

Check for ditches, stumps, holes, or other obstacles that could cause the tractor to roll.

To dig properly, your digger must be able to raise or lower through the highest and lowest points of your lift arm travel without binding against the tractor frame. Check carefully BEFORE attaching the auger. If it does bind, adjust the tractor 3-pt. linkage so that all movement is free.

Use stabilizer bars, adjustable sway chains, or sway blocks on your tractor lift arms to keep the post hole digger from swaying side to side. Adjust as tightly as practical for best performance. Remove or place tractor drawbar in storage position.

IMPORTANT

■ **Post hole digger gearboxes are shipped without lubrication. Gearboxes must be serviced with 90W gear lube before operation.**

■ **If PTO driveline interferes with swinging drawbar, swing drawbar out of the way or remove.**

OPERATING TECHNIQUE

⚠ WARNING

■ **Never aim auger point using hands on auger, gearbox, boom, or driveline. Use 3-point and handle to place auger point.**

■ **Do not shovel dirt away from a running auger. The shovel could be caught and thrown by auger.**

IMPORTANT

■ **NEVER use body weight to help the auger penetrate the ground.**

1. Position the tractor so that the auger point is placed where the hole is to be dug.
2. Set tractor brakes. Shift transmission into park or neutral.
3. Do not allow anyone to stand behind, or to the side of a rotating auger.
4. Lower auger point slowly to the ground with the PTO disengaged.

The point of the auger should be approximately 3" back of center of the gearbox. As the auger works into the ground, this slight angle will straighten, due to the pivoting action of the boom downward. If the auger has a side tilt, correct with the lift arm adjustment on the tractor hitch.

If the auger tilts too far forward or to the rear, it may be necessary to move the tractor slightly. Be careful not to bend the auger.

With the auger point lowered to the ground, set the engine speed to idle, then engage the PTO. Make sure the auger point is on the ground before engaging the PTO.

IMPORTANT

■ **Under no circumstances should the PTO be run in excess of 540 RPM.**

As the auger penetrates the ground, lower the unit slowly with the 3-point lift arms. **Do not let the auger screw itself into the ground!** Auger must dig with the dirt breaking up and being carried to the top by the auger flighting.

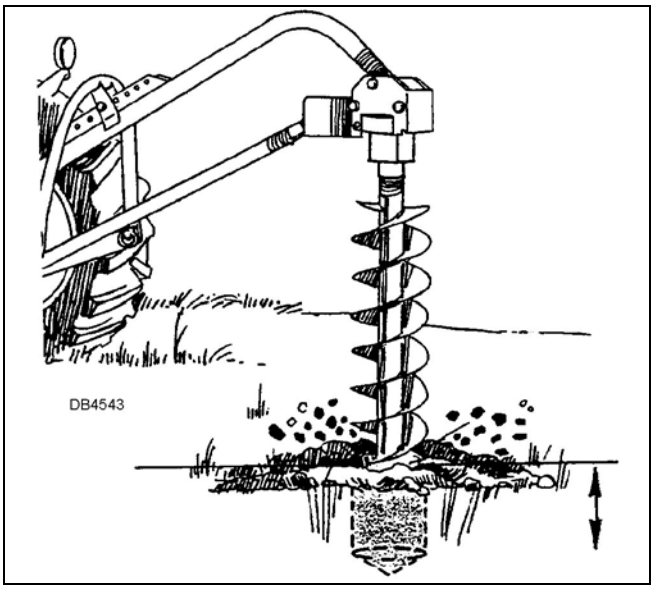


Figure 1. Operation

Dig the hole in small steps. Dig down several inches, then bring the auger up to let the soil clear. Repeat this procedure until the desired depth is reached. This allows better control of the auger and can prevent difficulties that could lead to an accident.

IMPORTANT

■ **Be careful when raising the auger as high as your tractor's 3-point lift arms can go. This can put the PTO shaft universal joints at an extreme angle and cause damage to the PTO shaft! It is best to raise the auger just enough to clear the hole when the PTO is engaged.**

■ **It is recommended NOT to raise the auger while it is running more than six (6) inches above the ground. Once the hole is dug to the desired depth raise the auger while rotating to bring the dirt out of the hole.**

To get a clean hole, it is sometimes best to lower the auger into the hole with the auger turning and then, when at the bottom, stop the rotation and raise the auger while not turning. This brings the dirt up with little left in the hole.

Disengage the PTO when traveling between holes.

In some types of soil it may be necessary to use the 3-point lift arms to prevent the auger from screwing itself into the ground.

When the ground is too tough to penetrate with your cutting edges and point, sharpen or replace them and try again. These are replaceable parts and must be in good condition to penetrate. (An optional Hydraulic Down Pressure Kit is available.)

If you have difficulty penetrating hard ground, refer to the Troubleshooting section in this manual for suggestions.

DOWN FORCE KIT OPERATION (OPTIONAL)

IMPORTANT

■ **Do not connect RETURN hose to a remote outlet. Remote outlet ports are blocked in the neutral position and will damage the hydraulic cylinder when boom is raised.**

1. Lower post hole digger using the 3-point arms and allow auger to dig.
2. If down force is required, slowly apply down force using the control lever for the remote outlet. Apply force in small amounts.
3. Continue to lower the auger using the tractor 3-point lift arms as the auger digs.
4. Raise auger with the 3-point lift arms. Cylinder will retract when auger is raised out of the hole.

TRANSPORT

⚠ WARNING

■ **Do not operate PTO during transport.**

The post hole digger auger is free-swinging, and care should be taken while transporting the machine.

Be sure auger is completely retracted from the hole before attempting to move the tractor.

DO NOT transport the post hole digger while the PTO is engaged as this could cause the universal joints of the PTO driveline into a sharp operating angle and cause failure of the driveline.

Pay particular close attention to the Safety Messages regarding transport. Avoid unnecessary injuries and equipment damage by exercising cautious, conscientious travel procedures.

Attaching the implement to the tractor increases the overall length of the working unit. Allow additional clearance for the implement to swing when turning.

Raise the implement as high as possible for transporting.

LODGED AUGER

⚠ WARNING

■ **When dislodging a stuck auger, disengage PTO, stop engine, remove key, disconnect PTO from tractor, and turn auger backwards with a wrench. Remove and store wrench before starting engine.**

IMPORTANT

■ **Removing a lodged auger can be dangerous work. Be careful.**

1. If the auger gets stuck in wet clay, stones or roots, disengage the PTO immediately and turn off the engine.
2. Turn the auger backwards several turns with a large pipe wrench. Then attempt to raise the auger with the 3-point lift arms. Extreme rocking or lifting loads while trying to clear auger can cause auger, gearbox. or boom failure.

   NOTE: Do not attempt to raise the auger while turning it with a wrench or with a wrench attached to the auger. You could be injured if the PTO was accidently engaged or the 3-point lift arms suddenly raised the auger.
3. Remove and store wrench before starting engine.

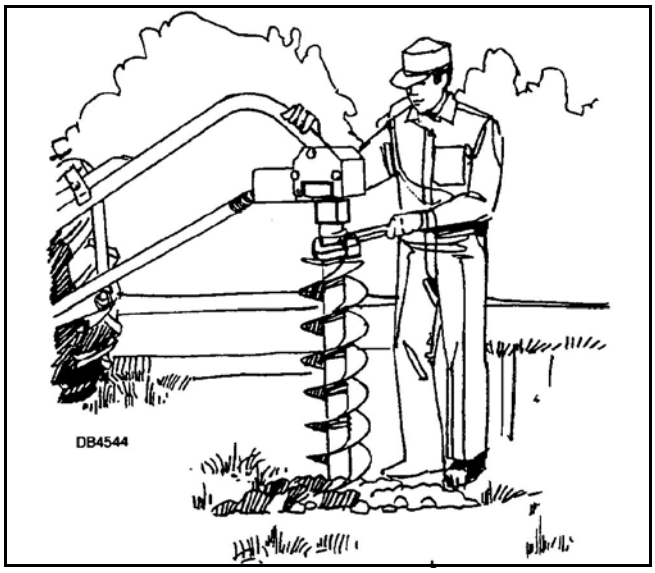


Figure 2. Dislodge Auger

SHEAR BOLT REPLACEMENT

⚠ WARNING

■ **Never replace shear bolt or auger retaining bolt with a different length, or grade. Always use a grade 2 bolt as a replacement.**

Remove input guard from around driveline.

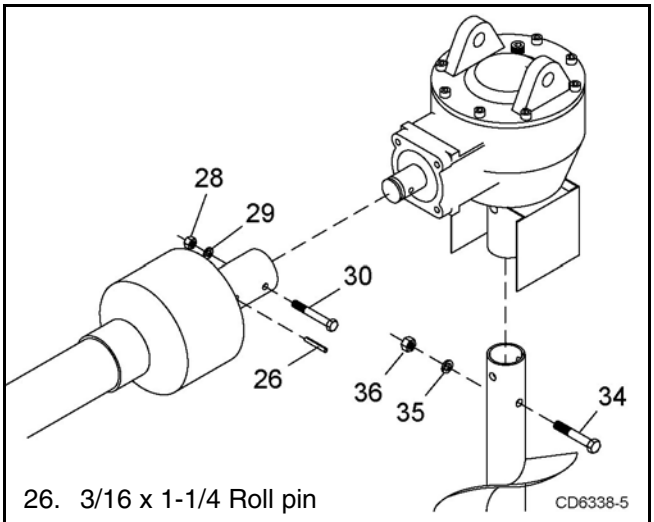
Shear bolts are important for both safety and preventing damage to the digger. Their intended function is to break when too much force is applied.

Always replace shear bolts at the gearbox input and output shafts with manufacturer's part or one of the same size, length and Grade 2 specification.

Hardened bolts or bolts that are too long can cause accidents resulting in injury or death.

The roll pin (26) prevents the driveline from coming off gearbox shaft if the shear bolt should fail.

Replace input shield after shear bolt replacement.



26. 3/16 x 1-1/4 Roll pin
28. 5/16 NC Hex nut
29. 5/16 Lock washer
30. 5/16 NC x 2-1/2 Cap screw GR2
34. 1/2 NC x 3 Cap screw GR2
35. 1/2 Lock washer
36. 1/2 NC Hex nut

Figure 3. Shear Bolt Replacement Shown Without Shield

PRE-OPERATION CHECKLIST (OWNER RESPONSIBILITY)

___ Review and follow all safety rules and safety decal instructions on pages 2 through 6.

___ Check that all safety decals are installed and in good condition. Replace if damaged.

___ Check that all shields and guards are properly installed and in good condition. Replace if damaged.

___ Consult local utilities before digging. Know location of and avoid contacting all underground cables, pipelines, overhead wires and other hazards in digging area.

___ Check that auger point and all cutting edges are intact and in good repair.

___ Check that equipment is properly and securely attached to tractor.

___ Make sure driveline spring-activated locking pin slides freely and is seated firmly in tractor PTO spline groove or gearbox PTO spline groove.

___ Set tractor PTO at correct rpm for your equipment.

___ Check all lubrication points and grease as instructed in “Service, lubrication information.”

___ Lubricate all grease fitting locations. Make sure telescoping PTO shafts and universal joints are lubricated.

___ Check that all hydraulic hoses and fittings are in good condition and not leaking before starting tractor. Check that hoses are not twisted, bent sharply, kinked, frayed or pulled tight. Replace any damaged hoses immediately.

___ Make sure tractor 3-point lift links do not interfere with hydraulic hoses or driveline throughout full turning range.

___ Check that all hardware and cotter pins are properly installed and secured.

___ Check attitude adjustment of auger.

___ Check and keep all bystanders away from equipment working area.

___ Before starting engine, operator must be in tractor seat with seat belt fastened. Place transmission in neutral or park, engage brake and disengage tractor PTO.

OWNER SERVICE

The information in this section is written for operators who possess basic mechanical skills. If you need help, your dealer has trained service technicians available. For your protection, read and follow all safety information in this manual.

⚠ WARNING

■ **Before performing any service or maintenance, lower digger to ground or block securely, turn off tractor engine, remove key, and disconnect driveline from tractor PTO.**

■ **NEVER GO UNDERNEATH EQUIPMENT. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak-down, hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death.**

- **Service work does not require going underneath.**
- **Read Operator's Manual for service instructions or have service performed by a qualified dealer.**

■ **Keep all persons away from operator control area while performing adjustments, service, or maintenance.**

■ **Keep hands, feet, hair, and clothing away from equipment while engine is running. Stay clear of all moving parts.**

■ **Keep hands and body away from pressurized lines. Use paper or cardboard, not hands or other body parts to check for leaks. Wear safety goggles. Hydraulic fluid under pressure can easily penetrate skin and will cause serious injury or death.**

⚠ WARNING

■ **Make sure that all operating and service personnel know that if hydraulic fluid penetrates skin, it must be surgically removed as soon as possible by a doctor familiar with this form of injury or gangrene, serious injury, or death will result. CONTACT A PHYSICIAN IMMEDIATELY IF FLUID ENTERS SKIN OR EYES. DO NOT DELAY.**

⚠ CAUTION

■ **Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.**

ROUTINE MAINTENANCE

1. Check that all bolts, nuts, and screws are tight. Checking the bolts and nuts on the cutting blades is particularly important in rocky soil.
2. Check daily the level of the gearbox oil and top-off up to the correct level. Check for gearbox oil leaks. It should be noted that no warranty claim can be submitted on a gearbox that has run dry. It is essential that the gearbox is kept correctly filled with gearbox oil.
3. Grease the PTO shaft daily.
4. Check the wear on the cutting blades. Sharpen them routinely with an angle grinder or replace when worn down too far. Keep at least two sets of cutting blades, bolts, and nuts as spares.

LUBRICATION INFORMATION

⚠ CAUTION

■ **When lubricating telescoping PTO drives, keep fingers out of shield access slots to prevent injury.**

The accompanying chart gives the frequency of lubrication in operating hours, based on normal conditions. Severe or unusual conditions may require more frequent lubrication.

Do not let excess grease collect on or around parts, particularly when operating in sandy areas.

Use an SAE 90W gear lube in gearbox.

Use a lithium grease of No. 2 consistency with a MOLY (molybdenum disulfide) additive for all locations. Be sure to clean fittings thoroughly before attaching grease gun. When applied according to the lubrication chart, one good pump of most guns is sufficient. Do not over grease.

LUBRICATION CHART

Ref. No.	Description	Frequency
1	Front U-Joint	8 Hours
2	Rear U-Joint	8 Hours
3	Rear U-Joint to Input Shaft	Seasonally
4	Gearbox (Fill to proper level)	Check Daily

Daily lubrication of the PTO slip joint is necessary. Failure to maintain proper lubrication can result in damage to U-joints, gearbox, tractor PTO and/or driveline.

STORAGE

1. Drain and change the oil in your gearbox.
2. Check and replace, where necessary, blades, bolts, nuts on the machine.
3. Clean machine and touch up any rust spots that may have appeared.
4. Replace any safety signs if damaged or painted over.
5. Make sure PTO driveline yoke and gearbox input shaft are clean and free of burrs. Keep well lubricated to prevent galling of yoke and input shaft when shear bolt becomes sheared.
6. Keep all shields in place. Order new shields if damaged or missing.
7. Keep cutting edges sharp. Sharp cutting edges dig easier and better. Outer cutting edges on larger augers wear faster than inner cutting edges; switching teeth will even wear.
8. Store implement in clean, dry location.

REMOVE DIGGER FROM TRACTOR

Optional parking stand is also available. Check with dealer for availability.

Post hole diggers when off the tractor, can be an awkward piece of equipment to handle. Be careful not to pinch hands and fingers in the various hinge points of the digger.

If possible, it is suggested to hang the digger from an overhead rafter or beam. Attach the chain or rope around the boom just ahead of the gearbox. This allows one man to easily reconnect the digger to the tractor when next use is required.

If storing outside, another idea is to dig a hole about 12-18 inches deep. Then shut the PTO off while the auger is in the hole. Set parking brake, turn off engine, and disconnect the digger from the tractor. The auger in the hole will keep the unit upright and make it possible for one man to disconnect or reconnect to the tractor. Doing this, will cause rusting of the auger, but it is easy for one man to handle the unit.

REPLACE CUTTING EDGE

Cutting edges and center points are replaceable. They should be sharpened or replaced when worn.

1. Remove carriage bolt (4), star washer (5), and hex nut (6) holding cutting edge to the auger.
2. Replace or sharpen cutting edge. Install carriage bolt, star washer, and hex nut previously removed.
3. Remove center point (2) by turning counter-clockwise. A pipe wrench may be required if tip has been on auger for a long period of time.

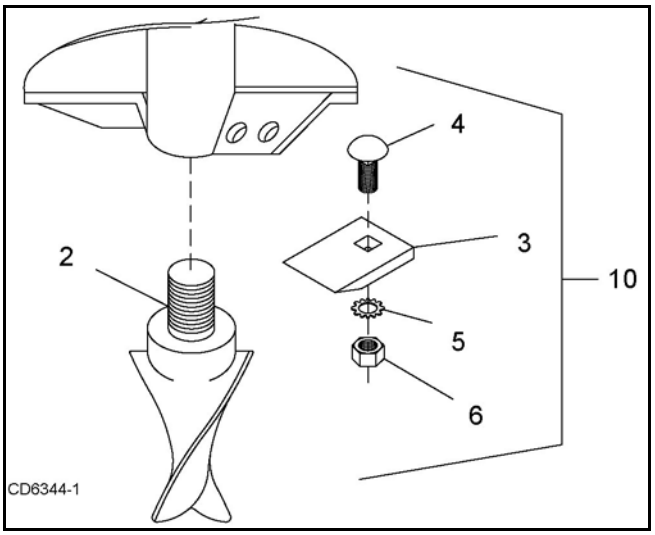


Figure 4. Cutting Edge Replacement

POST HOLE DIGGER OPTIONS

1. **Hydraulic Down Force Kit:** For tough, hard soil conditions. This will allow operator to put 300-400 lbs. of down force on the auger to force cutting edges into tough or hard ground. Tractor must have auxiliary hydraulic outlet. Order part 1009336.
2. **Parking Stand:** Order part 1009324
3. **Category 0 Mounting Pin Kit:** Order part 1009326

CLEAN POST HOLE DIGGER

After Each Use

- Remove large debris such as clumps of dirt, grass, crop residue, etc. from machine.
- Inspect machine and replace worn or damaged parts.
- Replace any safety decals that are missing or not readable.

Periodically or Before Extended Storage

- Clean large debris such as clumps of dirt, grass, crop residue, etc. from machine.
- Remove the remainder using a low-pressure water spray.
  1. Be careful when spraying near scratched or torn safety decals or near edges of decals as water spray can peel decal off surface.
  2. Be careful when spraying near chipped or scratched paint as water spray can lift paint.
  3. If a pressure washer is used, follow the advice of the pressure washer manufacturer.
- Inspect machine and replace worn or damaged parts.
- Sand down scratches and the edges of areas of missing paint and coat with Woods spray paint of matching color (purchase from your Woods dealer).
- Replace any safety decals that are missing or not readable (supplied free by your Woods dealer). See Safety Decals section for location drawing.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES & SOLUTION
Auger will not dig	Shear bolt sheared – install new shear bolt. Teeth dull – sharpen or replace. Ground too dry and hard – order optional down force kit, or wait until it rains. Auger turning too fast and bouncing – reduce speed. Tall grass has wrapped around auger teeth – remove grass. Auger encountering rocks, roots, or other obstruction – lift auger from hole and inspect. Auger teeth improperly positioned – see Parts section in this manual for proper tooth pattern.
Post hole digger sways side to side	No sway bars or sway blocks on tractor – add same. Lift arms not adjusted evenly – adjust lift arms. Post hole digger is mounted with excessive looseness in the hitch connecting points – use proper size pins or bushings.
Bent auger flighting or bent auger	Tractor moved while auger was turning in hole – always set brakes on tractor and make sure it is out of gear. Operator moved tractor with auger in hole to try and straighten a hole being dug at an angle. Auger is encountering rocks or roots or other foreign objects – remove object from hole or change location. Outer edge of auger flighting is bending due to contact with rocks or roots – use heavy-duty auger with thicker flighting. Shear bolt has been replaced with harder bolt – replace with Grade 2 bolt per instructions.
Auger screws itself into the ground	Operator did NOT ease 3-point hitch to ground slowly. Faulty 3-point hitch hydraulic system on tractor. Draft control is not in OFF position. Tractor is too small to handle digger.
Excessive vibration	PTO driveline bearing cross is worn – replace.
PTO driveline assembly comes off input shaft of gearbox when shear bolt is sheared	Roll pin missing in yoke at gearbox input shaft. Install roll pin as per instructions. **THIS IS A DANGEROUS SAFETY HAZARD, CORRECT IMMEDIATELY!**
Auger digs so far, but will not dig deeper	See solutions for above. PTO assembly “bottoms out,” not allowing digger to lower – remove auger from digger and lower digger. Gearbox should lower to the ground; if not, PTO driveline assembly may need to be shortened. PTO driveline interferes with swinging drawbar – swing drawbar out of the way or remove. Tractor hydraulic system may be faulty – consult tractor dealer. Soil could have hardpan layer 6"-10" below surface – use optional down force kit (see list of optional equipment).

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES & SOLUTION
PTO driveline failure	Operator raising post hole digger too high above ground when PTO is engaged – causes excessive PTO joint operating angle. PTO is engaged while moving between holes. (Auger swings, which causes excessive PTO joint operating angle.) Improper use of a hard shear bolt – use Grade 2 bolt per instructions. Driveline has not been properly lubricated. Engaging tractor PTO with engine at high rpm. Digging holes too deep so that PTO driveline contacts ground. Operating at high rpm. Use of auger extension can require post hole digger to be lifted high, which can cause excessive PTO joint operating angle.
PTO driveline “galls” or “friction welds” to input shaft of gearbox	Tractor is a “low profile model” (one that is low to the ground). Due to the low height of the tractor, the digger must be raised higher to have the bottom of the auger clear the ground. Generally, low profile model tractors can only use 30" long augers (standard auger length is 42"). Use a different tractor or purchase 30" long augers. No lubrication on input shaft of gearbox to allow yoke of PTO driveline to turn freely on input shaft when shear bolt is sheared. Always keep input shaft greased.
Gearbox failure	No oil in gearbox. Oil not changed per instructions. Shear bolt has been replaced with a harder bolt – replace with Grade 2 per instructions. Bent output shaft is due to operator moving tractor when auger is in hole.
Gearbox overheating	Low on lubricant – fill to proper level. Improper type lubricant – replace with proper lubricant.
Auger bolts shear on gearbox output shaft	Shear bolt on input shaft has been replaced with a harder bolt – replace with Grade 2 bolt as per instructions.
Tractor stalls	Auger is encountering rocks or roots or other foreign object – remove object or change hole location. Tractor idle is not set correctly – tune tractor engine.

ASSEMBLY INSTRUCTIONS

⚠ WARNING

■ **Keep hands, feet, hair, and clothing away from equipment while engine is running. Stay clear of all moving parts.**

■ **Keep all persons away from operator control area while performing adjustments, service, or maintenance.**

■ **Make sure spring-activated locking pin or collar slides freely and is seated firmly in tractor PTO spline groove.**

⚠ CAUTION

■ **Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.**

DEALER SET-UP INSTRUCTIONS

Assembly of the post hole digger is the responsibility of the WOODS dealer. It should be delivered to the owner completely assembled, lubricated, and adjusted for normal conditions.

The digger is shipped partially assembled. Assembly will be easier if the components are aligned and loosely assembled before tightening hardware. Recommended torque values for hardware are located on page 31.

Select a suitable working area. Open parts boxes and lay out parts and hardware to make location easy. Refer to illustrations, accompanying text, parts lists and exploded view drawings.

IMPORTANT

■ **Post hole digger gearboxes are shipped without lubrication. Gearboxes must be serviced with 90W gear lube before operation.**

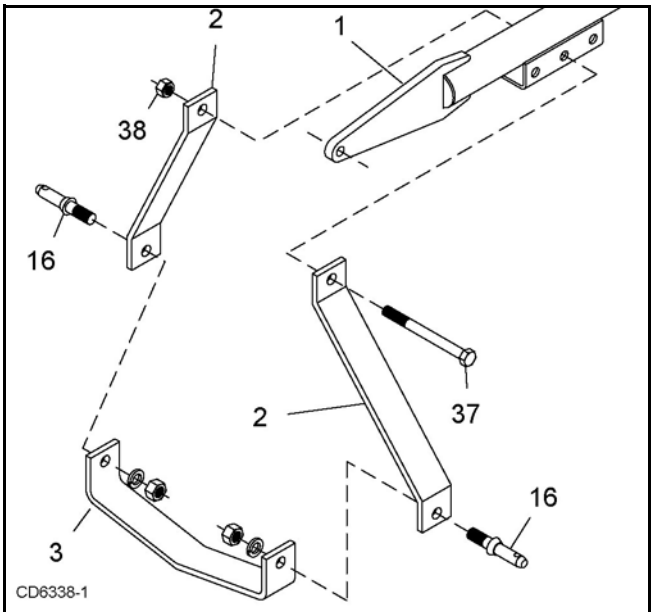
ATTACH A-FRAME TO BOOM

A tractor is required during assembly of post hole digger. A tractor will make part fit-up, part alignment, and part handling easier.

1. Connect A-frame bars (2), Figure 1, to the lower crossbar (3) using mounting pins (16) and hardware supplied with pins.
2. Connect A-frame and cross to the tractor 3-point arms.
3. Attach boom (1) to the tractor top link bracket using top link pin not supplied with digger.
4. Align top holes on the A-frame bars with the adjustment channel, starting with the middle hole on the boom. Secure into position using cap screw (37) and lock nut (38).

IMPORTANT

■ **With A-frame and boom attached to tractor, raise boom by hand. Check clearance between boom and top link bracket. If interference exists, change hole location and recheck. Failure to check can result in damage to the tractor or boom.**

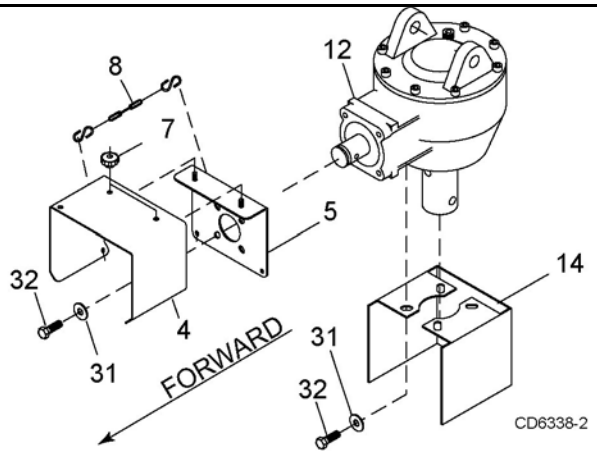


1. Boom assembly
2. A-frame bar (side bar)
3. Crossbar (lower bar)
16. Category I mounting pin (included nut & lock washer)
37. 3/4 NC x 5-1/2 Cap screw GR2
38. 3/4 NC Nylock hex nut

Figure 1. A-Frame to Boom Assembly

INSTALL SAFETY SHIELDS

1. Place gearbox upside down on a suitable work surface.
2. Attach output shield (14), Figure 2, around the output shaft and secure to gearbox using four cap screws (32) and flat washers (31). Position shield opening to the front.
3. Attach input guard mounting bracket (5) over input shaft and secure to gearbox using four cap screws (32) and flat washers (31).
4. Attach input guard (4) to the input guard mounting bracket (5) and secure with two threaded knobs (7). Retaining chain (8) keeps guard and mounting bracket together.

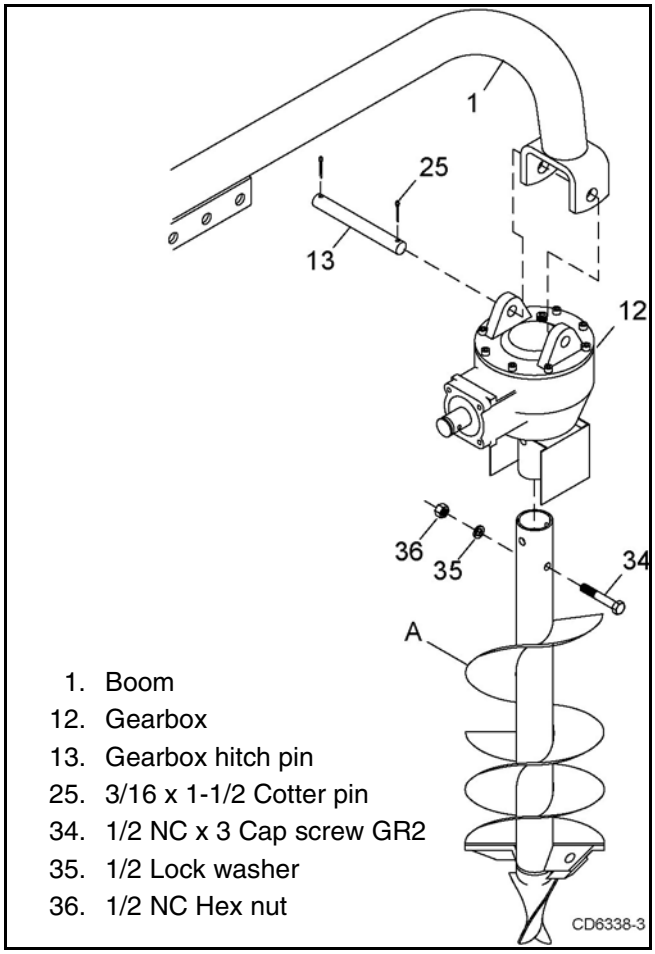


4. Input guard
5. Input guard mounting bracket
7. Knob
8. Guard retainer chain
12. Gearbox
14. Output shield
31. 5/16 Flat washer
32. 8M x 1.25P x 12mm

Figure 2. Safety Shield Installation

ATTACH GEARBOX TO BOOM

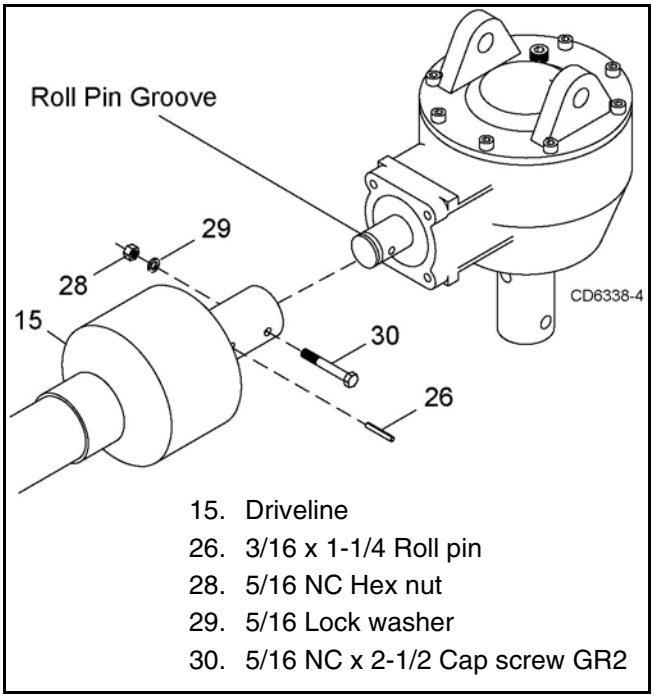
1. Attach desired auger (A), Figure 3, to output shaft of gearbox (3). Secure with two grade 2 cap screws (34), lock washers (35), and hex nuts (36). Do not tighten hardware at this time.
2. Stand gearbox and auger assembly on auger point.
3. Place gearbox and auger assembly under boom and slowly lower 3-point arms of tractor.
4. Align gearbox mounting lug and boom. Secure together using gearbox hitch pin (13) and two cotter pins (25).



1. Boom
12. Gearbox
13. Gearbox hitch pin
25. 3/16 x 1-1/2 Cotter pin
34. 1/2 NC x 3 Cap screw GR2
35. 1/2 Lock washer
36. 1/2 NC Hex nut

Figure 3. Gearbox to Boom Installation

INSTALL DRIVELINE



15. Driveline
26. 3/16 x 1-1/4 Roll pin
28. 5/16 NC Hex nut
29. 5/16 Lock washer
30. 5/16 NC x 2-1/2 Cap screw GR2

Figure 4. Driveline Installation

1. Clean input shaft on gearbox and smooth bore of driveline yoke. Remove any foreign material or paint. Lightly file any nicks or dents.
2. Grease the input shaft of the gearbox. This reduces the chance of the driveline gauling the shaft if the shear bolt should fail.
3. Slide driveline over input shaft and align cross holes. Insert shear bolt (30) to hold parts together.
4. Install roll pin (26) into driveline yoke to secure driveline to gearbox input shaft. Remove shear bolt (30) from cross hole. Driveline yoke should spin freely on shaft.

   NOTE: The roll pin prevents the driveline from coming off gearbox shaft if the shear bolt should fail.
5. Secure driveline to input shaft with shear bolt (30), lock washer (29), and hex nut (28).

ADJUST DRIVELINE LENGTH

Check Driveline Movement

1. Remove auger from gearbox.
2. Attach driveline to the tractor PTO shaft.
3. Remove or place tractor drawbar in storage position.
4. Slowly raise and lower boom with the tractor 3-point arms. Check the driveline to see if it separates, binds, or bottoms out.

   NOTE: Gearbox should lower to the ground. If not, change hole location between A-frame and boom or see if driveline is bottoming out. If driveline is bottoming out it will need to be shortened.

Shorten Driveline (If Required)

1. Remove driveline from gearbox shaft and tractor PTO.
2. Lower digger (with auger removed) until the input shaft of gearbox is in line with the PTO shaft of the tractor. This is the shortest distance required for the driveline.
3. Pull driveline apart. Connect driveline halves back to the gearbox and tractor PTO shaft.
4. Hold the two halves parallel to one another to determine how much the driveline must be shortened. Mark each end.

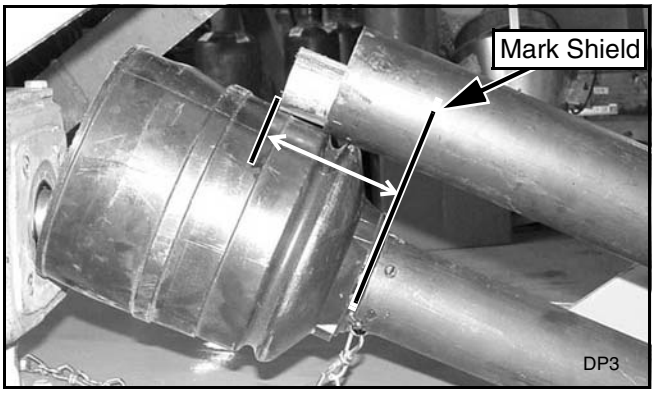


Figure 5. Example of Overlap

5. Raise the digger to the transport position using the tractor 3-point arms.
6. Hold the two halves parallel to one another and check for a minimum of 6-inch (15 cm) overlap.

   NOTE: If driveline has less than 6 inches of overlap, do not use this driveline. Contact your dealer for a longer driveline.

   NOTE: If driveline has more than 6 inches of over lap, the driveline will need to be shortened.

Cut Driveline

1. Place driveline half in a padded vise and cut shield off at the determined length.

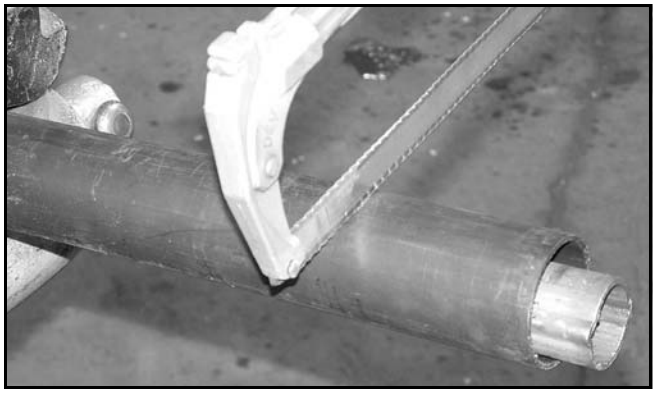


Figure 6. Cut Shield (Example)

2. Place the cutoff portion of the shield against the end of the shaft and use it as a guide. Mark and cut the shaft.

Figure 7. Cut Shaft to Length

3. Repeat steps for other drive half.
4. File and clean cut ends of the both drive halves.
5. Apply a multi-purpose grease to the outside of the male drive half. Slide the two drive halves together.
6. Connect driveline to gearbox and tractor PTO.

⚠ WARNING

■ **Make sure spring-activated locking pin or collar slides freely and is seated firmly in tractor PTO spline groove.**

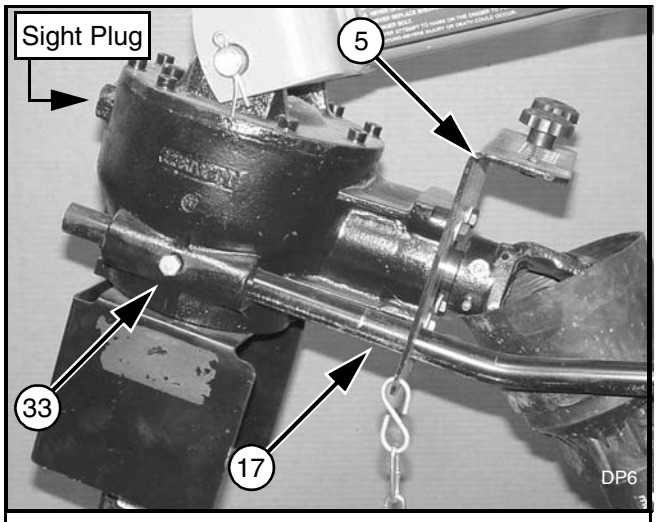
7. Make sure roll pin is installed in driveline yoke to secure driveline to gearbox input shaft.
8. Carefully raise and lower the digger to check that the driveline does not pull apart or bind through its range of motion.
9. Use stabilizer bars, adjustable sway chains, or sway blocks on your tractor lift arms to keep the post hole digger from swaying side to side. Adjust as tightly as practical for best performance.

FILL GEARBOX

1. Level gearbox and remove top fill plug and top sight plug on back side of gearbox.
2. Fill gearbox with approximately 58 fl-oz of SAE 90W gear lube or until oil runs out of sight hole.
3. Install both plugs.

INSTALL HANDLE

1. Slide handle (17), Figure 8, through hole in input guard mounting bracket (5) and opening in side of gearbox.
2. Secure to gearbox using cap screw (33).



5. Input guard mounting bracket
17. Handle
33. 5/16 NC x 3/4 Cap screw GR5

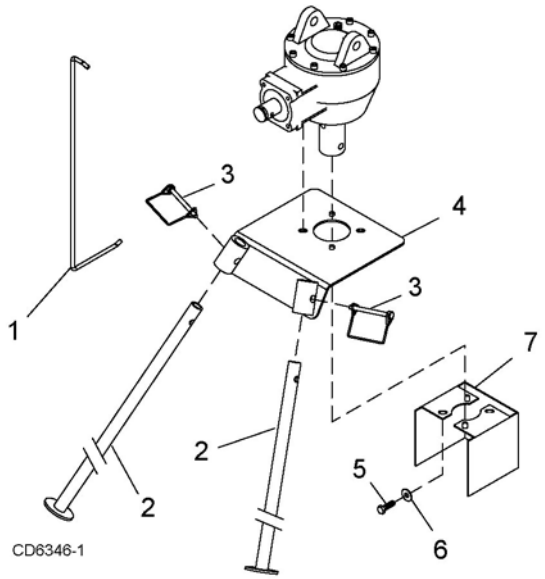
Figure 8. Handle Installed

Adjust Handle

Handle is used to position the auger as you lower the tip to the ground. You should be able to easily reach handle while seated in the tractor seat and operate the tractor 3-point lift arms. Adjust as necessary.

1. Bend handle as necessary to provide easy access from the tractor seat.
2. **Shorten Handle:** Remove plastic handle grip. Cut handle to desired length. Replace handle grip.
3. **Lengthen Handle:** Remove plastic handle grip. Weld extension of desired length to handle. Use same size tubing (7/8") as handle. Paint and replace handle grip.

INSTALL PARKING STAND (OPTIONAL)



1. PTO hook
2. Leg stand
3. Lock pin
4. Parking stand base plate
5. M8 x 1.25P x 16mm Cap screw CL8.8
6. 5/16 Flat washer
7. Output shield

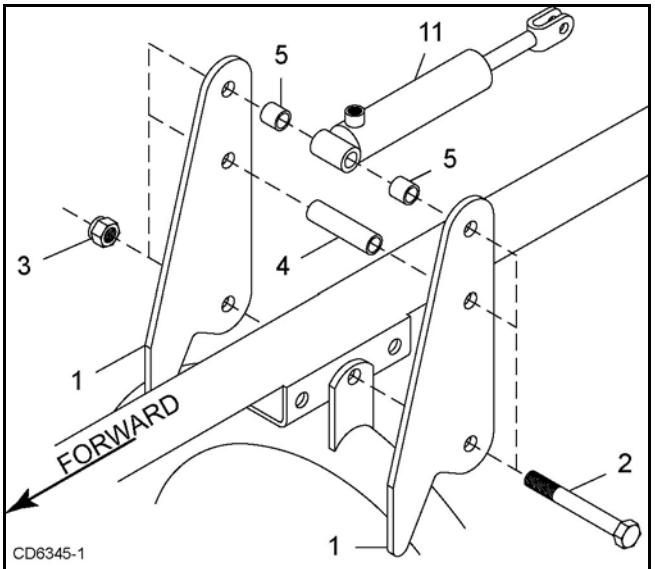
Figure 9. Parking Stand Installation

1. Remove auger from digger.
2. Remove hardware and output shield (7) from bottom of gearbox, Figure 9.
3. Attach parking stand base plate (4) and output shield (7) over the output shaft. Secure to the bottom of the gearbox using four new cap screws (5) and flat washers (6) supplied with the parking stand kit.
4. Install auger to output shaft using two cap screws previously removed.
5. Raise digger to the transport position.
6. Insert the two stand legs (2) into the socket on the front of the parking stand base plate. Secure with two locking pins (3).
7. Lower digger until the two legs and the auger form a tripod. This will support the post hole digger in a vertical position.
8. Remove 3-point arms and driveline from the tractor.
9. Attach the PTO hook (1) to the boom of the digger.
10. Hang the driveline from the hook to help prevent dirt and debris from accumulating in the locking collar on the driveline PTO yoke.

INSTALL DOWN FORCE KIT (OPTIONAL)

Install Pivot Plates and Cylinder

1. Remove cap screw that connects A-frame bars to the post hole digger boom.
2. Place pivot plates (1) over outside of A-frame bars and secure with cap screw (2) and lock nut (3).
3. Install second cap screw (2), sleeve (4), and lock nut (3) in middle hole.
4. Install third cap screw (2), two space sleeves (5), base end of cylinder (11), and lock nut (3) in top hole.



1. Pivot plate
2. 3/4 NC x 6 Cap screw GR5
3. 3/4 NC Lock nut
4. Sleeve, 3-7/8 long
5. Sleeve, 15/16 long
11. Cylinder

Figure 10. Pivot Plates Installation
(PHD35 Shown)

Install Cylinder Clamps

1. Make sure cylinder (11) is retracted.
2. Place cylinder clamps (6, top) and (7, bottom) around boom, Figure 12.
3. Loosely secure to boom using two cap screws (8), lock washers (9), and hex nuts (10). Clamp should slip on boom.
4. Attach cylinder to top clamp using cap screw (12) and lock nut (13).
5. Raise post hole digger to the full transport position.
6. With cylinder retracted, torque clamp bolts to 300 lbs-ft.

   NOTE: It may be necessary to retighten clamp bolts after initial use to keep the clamp from slipping.

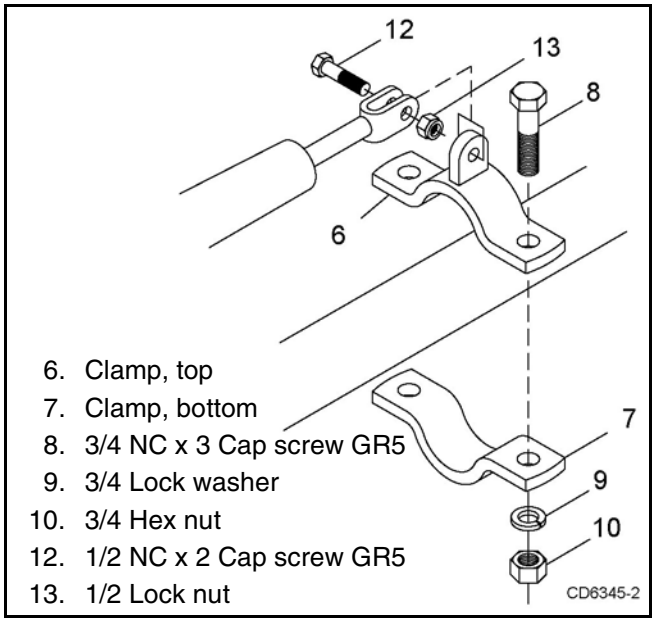


Figure 11. Cylinder Clamps Installation

Install Relief Valve and Hoses

1. Attach adapter (17) and relief valve (14) to the cylinder.
2. Attach male quick coupler (not supplied in kit) to PRESSURE hose (15). Attach hose to the top port on the relief valve.
3. Attach adapter (18) and RETURN hose (16) to the side port on the relief valve.
4. Connect opposite end of RETURN hose directly to the tractor hydraulic reservoir.

   NOTE: Fitting for this connection are not supplied with this kit.

IMPORTANT

■ **Do not connect RETURN hose to a remote outlet. Remote outlet ports are blocked in the neutral position and will damage the hydraulic cylinder when boom is raised.**

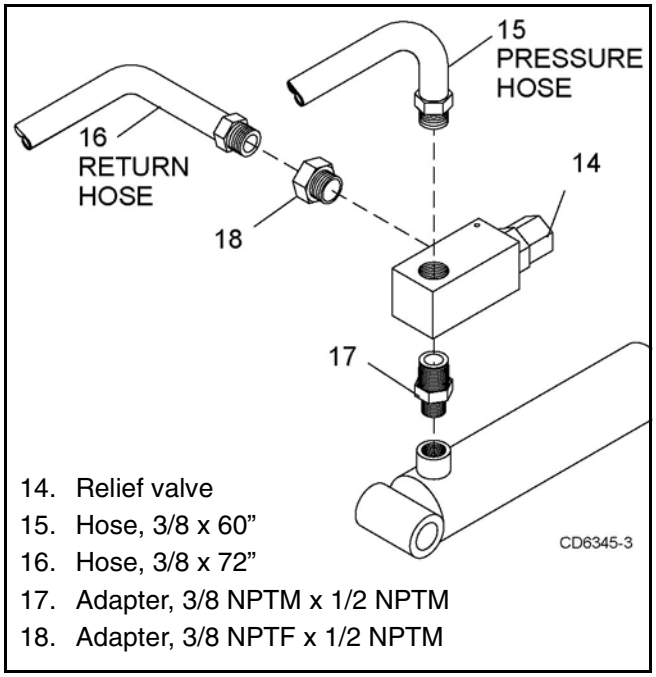


Figure 12. Relief Valve and Hoses Installation

Install Decal 1009330 on left side of pivot plate.

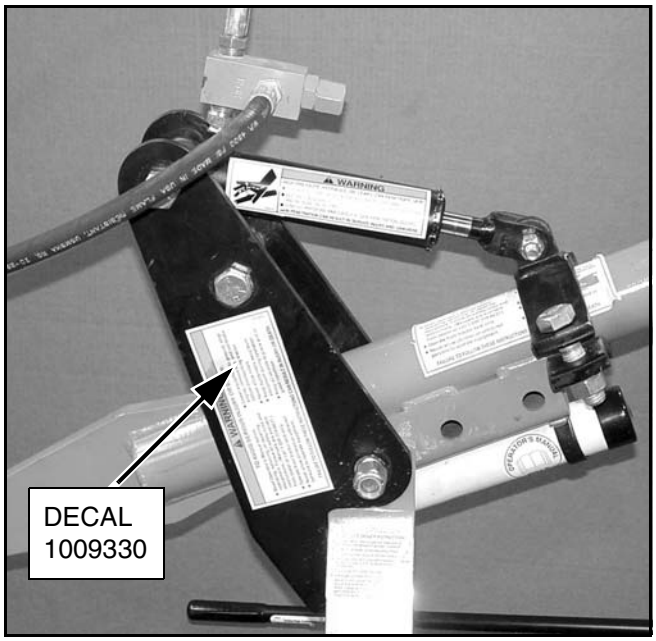


Figure 13. Down Force Kit Installed

DEALER CHECK LISTS

PRE-DELIVERY CHECK LIST (DEALER'S RESPONSIBILITY)

Inspect digger thoroughly after assembly to ensure it is set up properly before delivering it to the customer. The following check list is a reminder of points to inspect. Check off each item as it is found satisfactory or after corrections are made.

IMPORTANT

■ **Gearbox was not filled at the factory. It must be serviced before operating post hole digger. Failure to service will result in damage to gearbox.**

___ Check that all safety shielding and decals are properly installed and in good condition.

___ Check all bolts to be sure they are tight.

___ Gearboxes are not filled at the factory. Prior to delivery, fill as specified in the Service, lubrication information and check to see that there are no leaking seals.

___ Check that all cotter pins are properly installed.

___ Check that gearbox is serviced and not leaking.

___ Lubricate digger as specified in LUBRICATION INFORMATION, page 13.

DELIVERY CHECK (DEALER'S RESPONSIBILITY)

___ Point out safety features and explain the importance of safety decals and shielding. Explain the need to keep them properly installed and in good condition.

___ Present Operator's Manual and ask customer to read it before operating cutter.

___ Show customer how to make adjustments and properly mount digger to tractor.

___ Show customer how to make sure that driveline is properly installed and that the spring-activated locking pin slides freely and is seated in groove on tractor PTO shaft.

___ Instruct customer how to lubricate post hole digger and explain importance of lubrication.

___ Make customer aware of optional equipment available for this digger.

WOODS

PARTS INDEX

PHD25
General Purpose
Post Hole Digger

PHD25 POST HOLE DIGGER ASSEMBLY . . . . . 26 - 27

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AUGER ASSEMBLY 30

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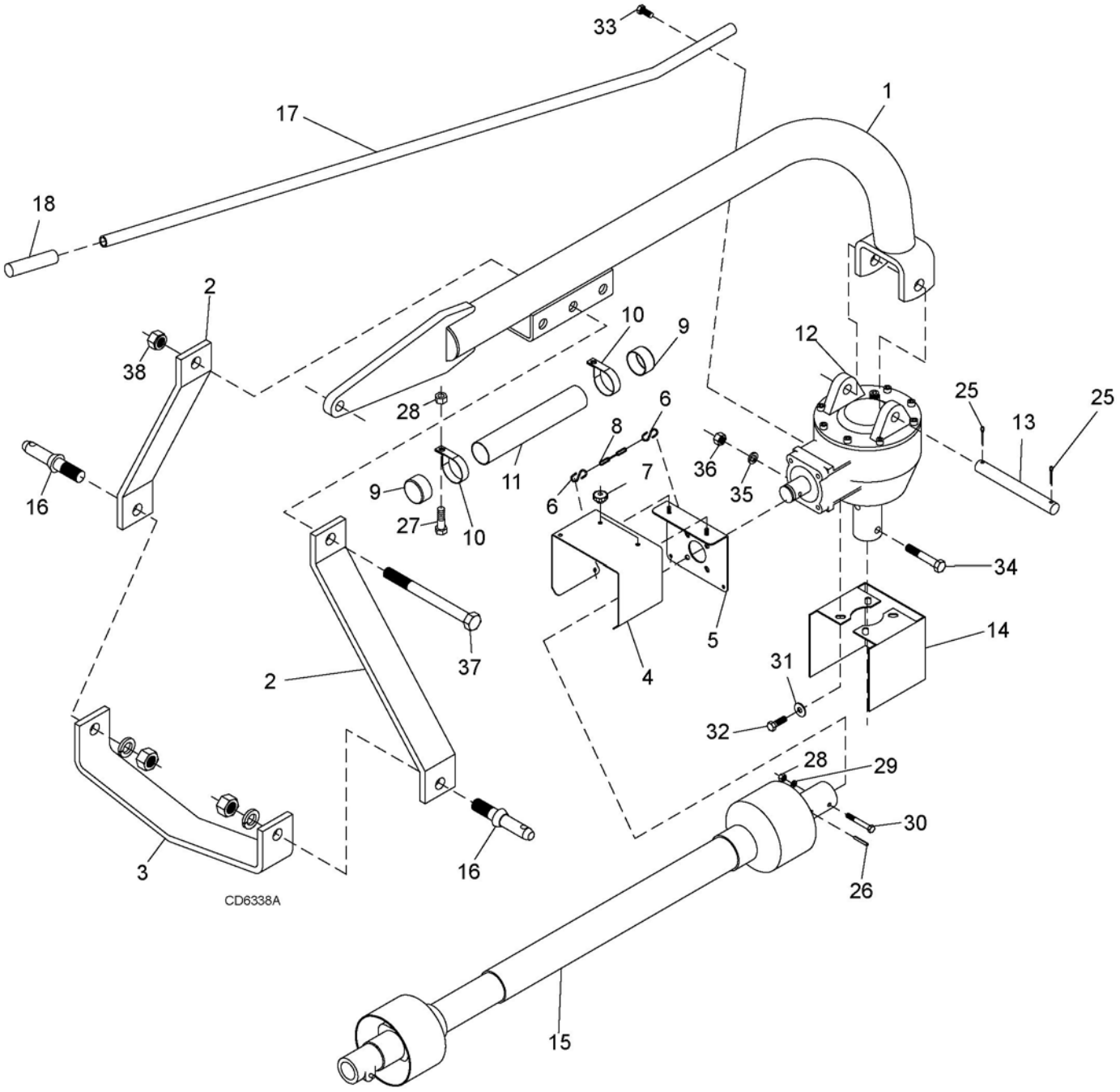
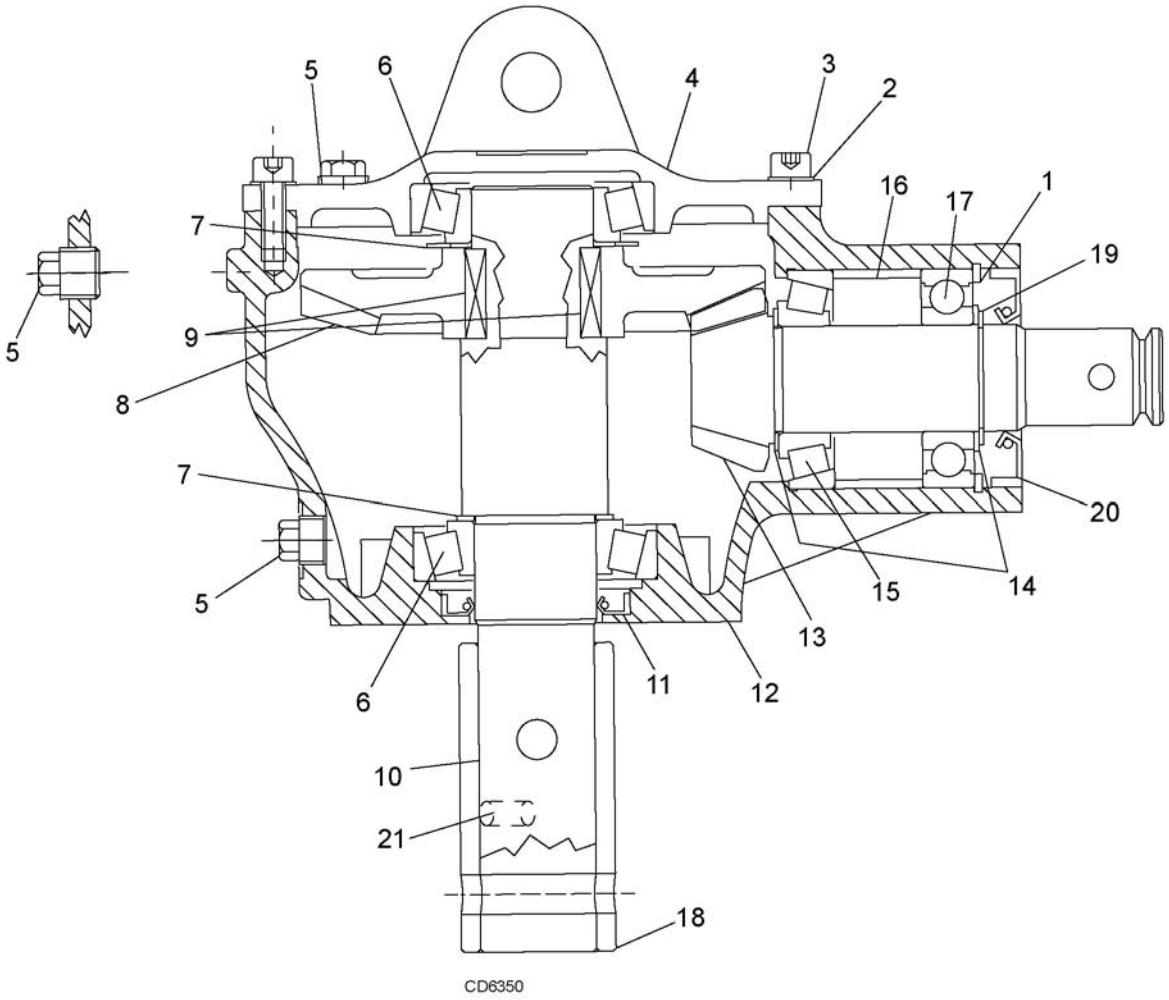
PHD25 POST HOLE DIGGER ASSEMBLY



PHD25 POST HOLE DIGGER ASSEMBLY PARTS LIST

REF	PART	QTY	DESCRIPTION
1	1009338	1	Boom assembly PHD25
2	1009339	2	A-Frame bar PHD25
3	1009340	1	Lower mounting bracket PHD25
4	1009342	1	Guard input
5	1009341	1	Input guard mount w/ decal
6	1009345	2	Hook chain guard retainer
7	1009343	2	Knob threaded
8	1009344	1	Chain guard retainer
9	1004657	2	Caplug 2.00 ID x 1.00
10	1004695	2	Clamp 1.94 dia pipe
11	1004656	1	Manual tube PVC 2.0 x 11.25
12	1009346	1	Gearbox complete PHD25/35
13	1009347	1	Pin, gearbox hitch
14	1009348	1	Shield, output
15	1009349	1	Driveline, complete
16	33661	2	Category 1 mounting pin w/nut & lock washer
17	1009350	1	Handle, PHD25/35
18	1009351	1	Grip, handle PHD25/35
25	1266*	2	3/16 x 1-1/2 Cotter pin
26	1009352*	1	Pin, roll 3/16 x 1-1/4
27	14562*	2	5/16 NC x 1 Hex head cap screw GR5
28	4529*	3	Nut, hex 5/16 NC
29	2472*	1	Washer, 5/16 lock
30	1009353	1	5/16 Shear bolt repair kit (contains five 5/16 NC x 2-1/2 GR2 Hex head cap screws, lock washers & nuts)
31	4378*	8	Washer, 5/16 std flat
32	39254	8	M8 x 1.25P x 16mm Hex head cap screw CL8.8
33	6096*	1	5/16 NC x 3/4 Hex head cap screw GR5
34	1009354	2	1/2 NC x 3 Hex head cap screw GR2
35	855*	2	Washer, lock 1/2
36	1093*	2	Nut, hex 1/2 NC
37	1009355	1	3/4 NC x 5-1/2 Hex head cap screw GR2
38	FA446	1	Nut 3/4 NC Nylock
40	1009356	1	Safety decal set PHD
41	1009357	1	Complete decal set PHD
		*	Standard Hardware - Obtain Locally

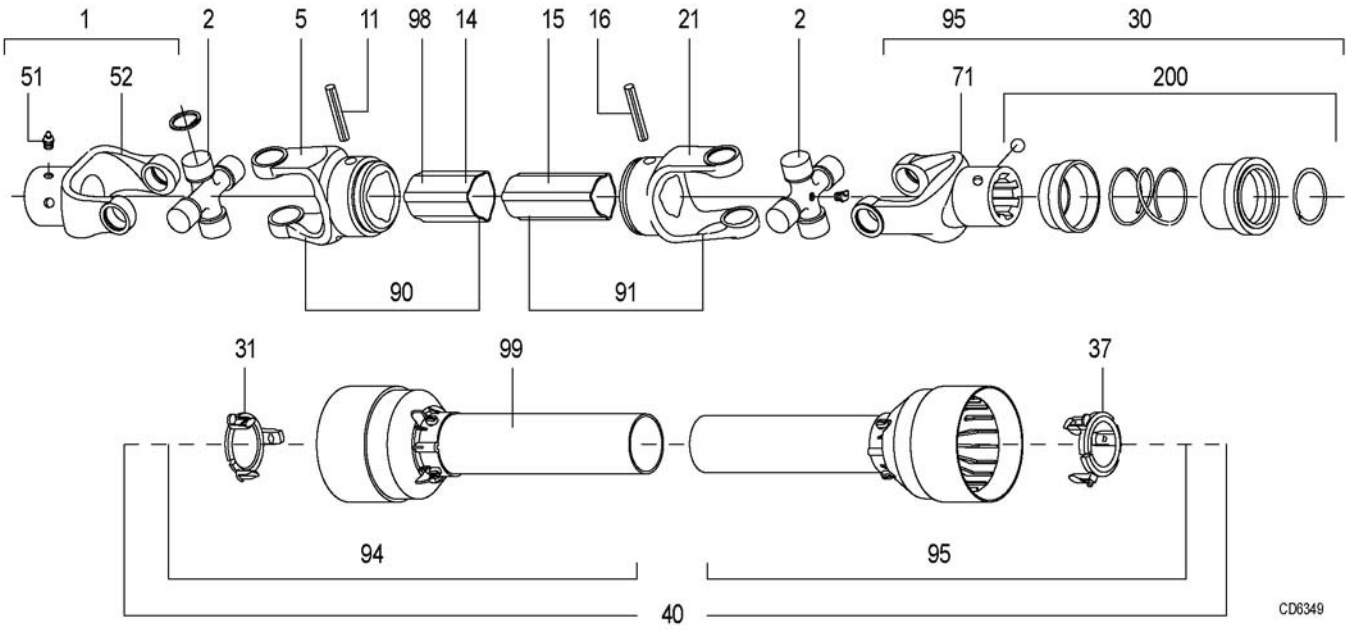
PHD25 GEARBOX ASSEMBLY



REF	PART	QTY	DESCRIPTION
	1009346	1	Gearbox complete PHD25/35
1	N/A	1	Snap ring, 72 x 75 x 2.5
2	N/A	8	Washer, internal tooth 8.4 x 15
3	N/A	8	M8 x 22 Hex socket head screw
4	N/A	1	Cover
5	N/A	3	Plug, 3/8 solid
6	57478	2	Bearing cup & cone
7	N/A	2	Shim kit
8	N/A	1	Crown z30 m5
9	N/A	2	Key parallel 10 x 8 x 30
10	N/A	1	Output shaft
11	1009322	1	Oil seal 40 x 62 x 7

REF	PART	QTY	DESCRIPTION
12	N/A	1	Casing
13	N/A	1	Pinion z10 m5
14	N/A	2	Shim kit (35.3 x 48)
15	1009321	1	Bearing, roller (35 x 72 x 1)
16	N/A	1	Spacer
17	20890	1	Bearing, ball 6207
18	1017477	1	Bushing, PDHD25/PHD35 gearbox
19	N/A	1	Snap ring (35 x 33 x 1.5)
20	57463	1	Seal, oil 35 x 72 x 10
21	1009320	1	Pin, 8 x 12 din 1481
	N/A		Not available

PHD25 DRIVELINE ASSEMBLY

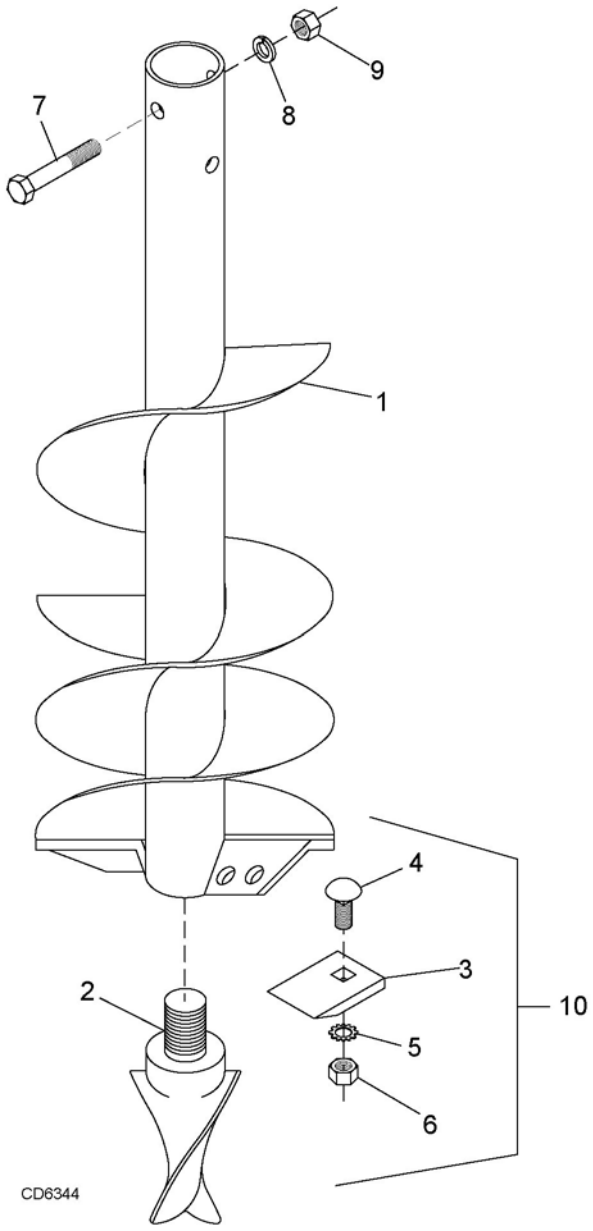


REF	PART	QTY	DESCRIPTION
	1009349	1	Driveline, complete
1	1009374	1	Yoke, complete w/ zerk
2	1009375	2	Cross, journal set
5	N/A	1	Outer yoke
11	N/A	1	Roll pin for outer yoke
14	N/A	1	Outer tube
15	N/A	1	Inner tube
16	N/A	1	Roll pin for inner tube
21	N/A	1	Inner yoke
30	1009376	1	Complete yoke collar
31	1009377	1	Collar, retaining guard outer
37	1009378	1	Collar, retaining guard inner
40	1009379	1	Guard, complete w/ manual

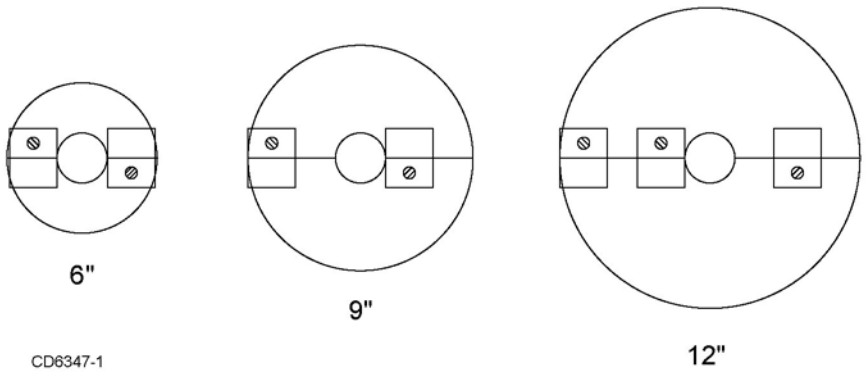
REF	PART	QTY	DESCRIPTION
51	N/A	1	Grease zerk M8 x 1
52	N/A	1	Special yoke
71	N/A	1	Collar yoke C12
90	N/A	1	Female tube yoke w/ pin & decal
91	N/A	1	Male tube yoke w/ pin
94	N/A	1	Guard, female half
95	N/A	1	Guard, male half
98	33347	1	Danger decal, guard missing
99	18864	1	Danger decal, rotating driveline
100	N/A	1	Manual, instruction
200	1001340	1	Lock collar repair kit
	N/A		Not available

PHD25 AUGER ASSEMBLY

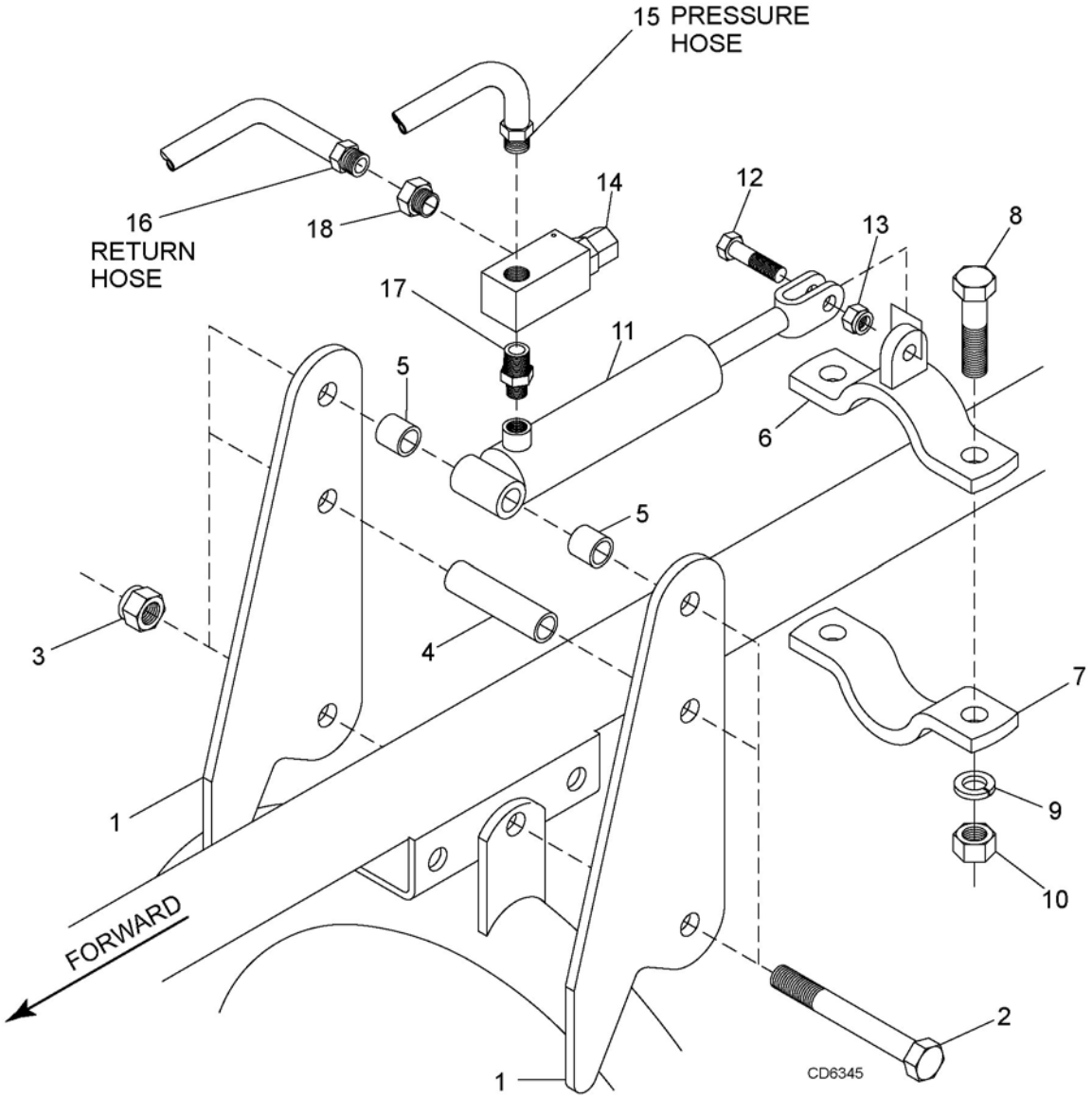
REF	PART	QTY	DESCRIPTION
1	1009300	1	6" Single flight auger 30" long
1	1009301	1	9" Single flight auger 30" long
1	1009302	1	12" Single flight auger 30" long
2	1009358	1	Auger point fishtail PHD
3	NSS	VAR	Cutting edge, red claw
4	NSS	VAR	1/2 NC x 1-1/4 Carriage bolt GR1
5	NSS	VAR	Washer 1/2 external star
6	NSS	VAR	Nut hex 1/2 NC
7	1009354	2	1/2 NC x 3 Hex head cap screw GR2
8	855	2	Washer, lock 1/2
9	1093	2	Nut, hex 1/2 NC
10	1009360	1	Kit, repair auger teeth (includes 2 cutting edges & hardware)
	NSS		Not sold separately



AUGER TOOTH MOUNTING PATTERN



PHD25 DOWN PRESSURE KIT (OPTIONAL)



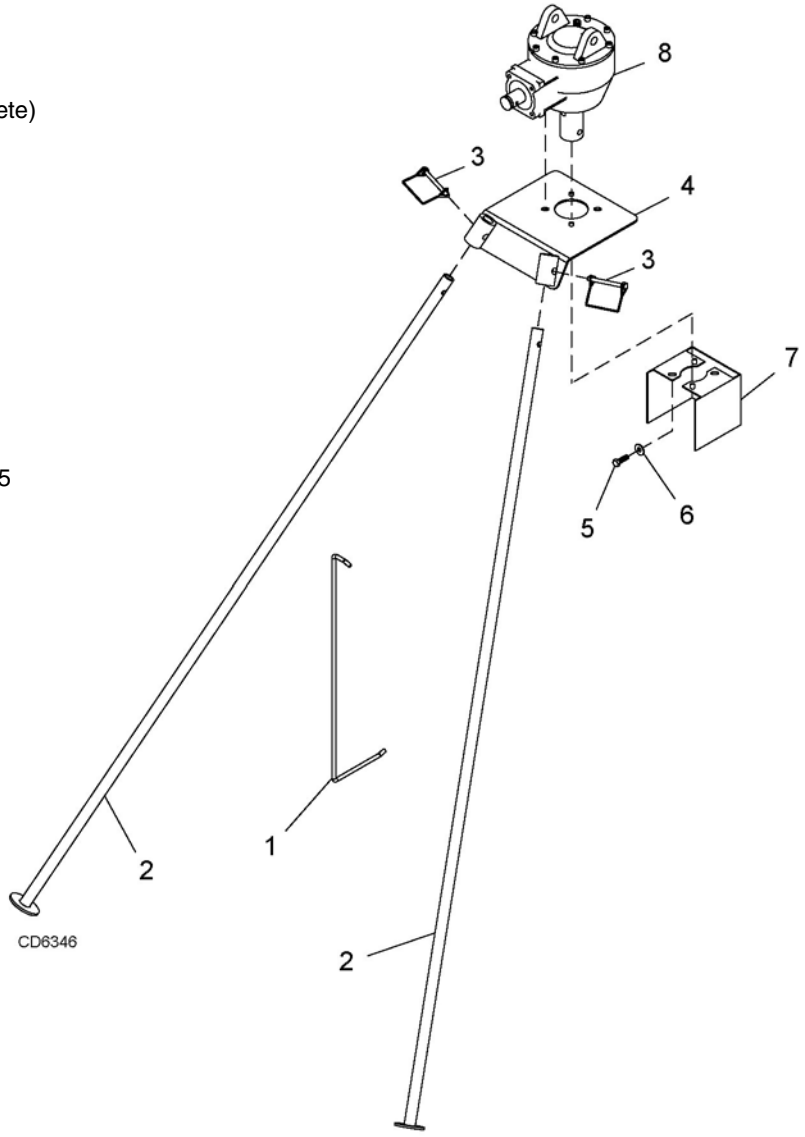
REF	PART	QTY	DESCRIPTION
-	1009336	1	Down pressure kit
1	1009361	2	Plate, pivot down pressure
2	2377	3	3/4 NC x 6 Hex head cap screw GR5
3	FA446	3	Nut, 3/4 NC nylock
4	1009362	1	Sleeve, 3-7/8 long
5	1009363	2	Sleeve, 15/16 long
6	1009364	1	Upper clamp
7	1009367	1	Clamp, lower half
8	14334	2	3/4 NC x 3 Hex head cap screw GR5
9	2522	2	Washer, 3/4 lock

REF	PART	QTY	DESCRIPTION
10	1450	2	Nut, hex 3/4 NC
11	1009368	1	Cylinder, down pressure
12	3699	1	1/2 NC x 2 Hex head cap screw GR5
13	6241	1	Nut, 1/2 NC elastic stop
14	1009369	1	Relief valve, down pressure
15	1009370	1	Hose, 3/8 x 60
16	1009371	1	Hose, 3/8 x 72
17	34234	1	Adapter, 3/8 NPTM 1/2 NPTM
18	10802	1	Adapter, 3/8 NPTF 1/2 NPTM
NS	1009373	1	Kit, seal cylinder 1.75 x 6.0
NS			Not Shown

PHD25 PARKING STAND (OPTIONAL)

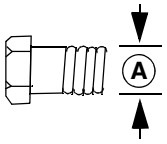
REF	PART	QTY	DESCRIPTION
	1009324	1	Stand PHD25 digger (complete)
1	1009327	1	Hook, PTO stand
2	1009328	2	Stand, leg PHD25
3	1009329	2	Pin, locking 5/16 dia
4	1009323	1	Plate, base PHD stand
5	39254	4	M8 x 1.25P x 16mm Hex head cap screw CL8.8
6	4378	*	Washer, 5/16 std flat
7	1009348	*	Shield, output
8	1009346	*	Gearbox complete PHD25/35

* Not included with stand kit



BOLT TORQUE CHART

Always tighten hardware to these values unless a different torque value or tightening procedure is listed for a specific application.
Fasteners must always be replaced with the same grade as specified in the manual parts list.
Always use the proper tool for tightening hardware: SAE for SAE hardware and Metric for metric hardware.
Make sure fastener threads are clean and you start thread engagement properly.
All torque values are given to specifications used on hardware defined by SAE J1701 MAR 99 & J1701M JUL 96.



SAE SERIES TORQUE CHART

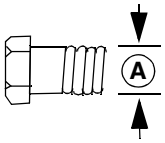
SAE Grade 2 (No Dashes)

SAE Bolt Head Identification

SAE Grade 5 (3 Radial Dashes)

SAE Grade 8 (6 Radial Dashes)

Ⓐ Diameter (Inches)	Wrench Size	MARKING ON HEAD					
		SAE 2		SAE 5		SAE 8	
		lbs-ft	N-m	lbs-ft	N-m	lbs-ft	N-m
1/4"	7/16"	6	8	10	13	14	18
5/16"	1/2"	12	17	19	26	27	37
3/8"	9/16"	23	31	35	47	49	67
7/16"	5/8"	36	48	55	75	78	106
1/2"	3/4"	55	75	85	115	120	163
9/16"	13/16"	78	106	121	164	171	232
5/8"	15/16"	110	149	170	230	240	325
3/4"	1-1/8"	192	261	297	403	420	569
7/8"	1-5/16"	306	416	474	642	669	907
1"	1-1/2"	467	634	722	979	1020	1383



METRIC SERIES TORQUE CHART

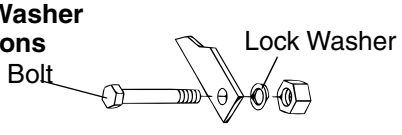
Metric Grade 8.8

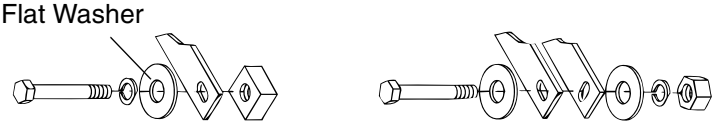
Metric Bolt Head Identification

Metric Grade 10.9

Ⓐ Diameter & Thread Pitch (Millimeters)	Wrench Size	COARSE THREAD				FINE THREAD				Ⓐ Diameter & Thread Pitch (Millimeters)
		MARKING ON HEAD				MARKING ON HEAD				
		Metric 8.8		Metric 10.9		Metric 8.8		Metric 10.9		
		N-m	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	
6 x 1.0	10 mm	8	6	11	8	8	6	11	8	6 x 1.0
8 x 1.25	13 mm	20	15	27	20	21	16	29	22	8 x 1.0
10 x 1.5	16 mm	39	29	54	40	41	30	57	42	10 x 1.25
12 x 1.75	18 mm	68	50	94	70	75	55	103	76	12 x 1.25
14 x 2.0	21 mm	109	80	151	111	118	87	163	120	14 x 1.5
16 x 2.0	24 mm	169	125	234	173	181	133	250	184	16 x 1.5
18 x 2.5	27 mm	234	172	323	239	263	194	363	268	18 x 1.5
20 x 2.5	30 mm	330	244	457	337	367	270	507	374	20 x 1.5
22 x 2.5	34 mm	451	332	623	460	495	365	684	505	22 x 1.5
24 x 3.0	36 mm	571	421	790	583	623	459	861	635	24 x 2.0
30 x 3.0	46 mm	1175	867	1626	1199	1258	928	1740	1283	30 x 2.0

Typical Washer Installations





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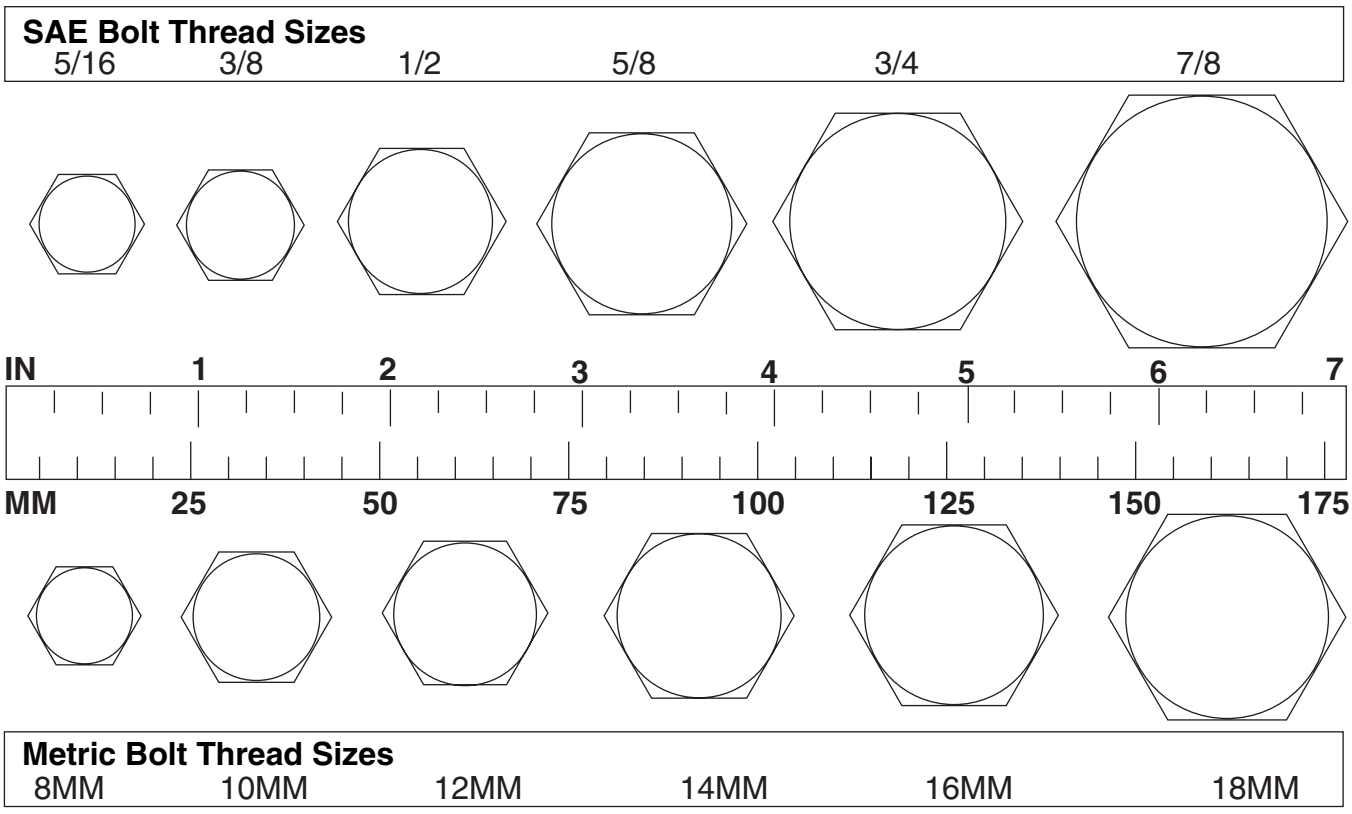
BOLT SIZE CHART

NOTE: Chart shows bolt thread sizes and corresponding head (wrench) sizes for standard SAE and metric bolts.



ABBREVIATIONS

AG ..... Agriculture
ATF ..... Automatic Transmission Fluid
BSPP ..... British Standard Pipe Parallel
BSPTM ..... British Standard Pipe Tapered Male
CV ..... Constant Velocity
CCW ..... Counter-Clockwise
CW ..... Clockwise
F ..... Female
GA ..... Gauge
GR (5, etc.) ..... Grade (5, etc.)
HHCS ..... Hex Head Cap Screw
HT ..... Heat-Treated
JIC ..... Joint Industry Council 37° Degree Flare
LH ..... Left Hand
LT ..... Left
m ..... Meter
mm ..... Millimeter
M ..... Male
MPa ..... Mega Pascal
N ..... Newton
NC ..... National Coarse
NF ..... National Fine
NPSM ..... National Pipe Straight Mechanical
NPT ..... National Pipe Tapered
NPT SWF ..... National Pipe Tapered Swivel Female
ORBM ..... O-Ring Boss - Male
P ..... Pitch
PBY ..... Power-Beyond
psi ..... Pounds per Square Inch
PTO ..... Power Take Off
QD ..... Quick Disconnect
RH ..... Right Hand
ROPS ..... Roll-Over Protective Structure
RPM ..... Revolutions Per Minute
RT ..... Right
SAE ..... Society of Automotive Engineers
UNC ..... Unified Coarse
UNF ..... Unified Fine
UNS ..... Unified Special

WARRANTY

(All Models Except Mow'n Machine™ Zero-Turn Mowers and Woods Boundary™ Utility Vehicles)

Please Enter Information Below and Save for Future Reference.

Date Purchased: _____ From (Dealer): _____

Model Number: _____ Serial Number: _____

Woods Equipment Company ("WOODS") warrants this product to be free from defect in material and workmanship. Except as otherwise set forth below, the duration of this Warranty shall be for TWELVE (12) MONTHS COMMENCING ON THE DATE OF DELIVERY OF THE PRODUCT TO THE ORIGINAL PURCHASER.

The warranty periods for certain gearboxes and blade spindles are listed below:

Model No.	Part Warranted	Duration
PHD25, PHD35, PHD65, PHD95, 1260, 2162, 3240, BB48, BB60, BB72, BB84, BB600, BB720, BB840, BB6000, BB7200, BB8400, BW180-2, BW1800, DS96, DS120, RCC42, RM550-2, RM660-2, RM990-3, PRD6000, PRD7200, PRD8400, 7144RD-2, 9180RD-2, 9204RD-2, S15CD, S20CD, S22CD, S25CD, S27CD	Gearbox components	5 years from the date of delivery to the original purchaser.
RDC54, RD60, RD72	Gearbox components	3 years from the date of delivery to the original purchaser.
RDC54, RD60, RD72	Gearbox components	1 year from the date of delivery to the original purchaser if used in rental or commercial applications.
RM550-2, RM660-2, RM990-3, PRD6000, PRD7200, PRD8400, 7144RD-2, 9180RD-2, 9204RD-2	Blade spindles	3 years from the date of delivery to the original purchaser.

Under no circumstances will this Warranty apply in the event that the product, in the good faith opinion of WOODS, has been subjected to improper operation, improper maintenance, misuse, or an accident. This Warranty does not apply in the event that the product has been materially modified or repaired by someone other than WOODS, a WOODS authorized dealer or distributor, and/or a WOODS authorized service center. This Warranty does not cover normal wear or tear, or normal maintenance items. This Warranty also does not cover repairs made with parts other than those obtainable through WOODS.

This Warranty is extended solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this Warranty does not transfer to the third party purchaser in any way. There are no third party beneficiaries of this Warranty.

WOODS makes no warranty, express or implied, with respect to engines, batteries, tires or other parts or accessories not manufactured by WOODS. Warranties for these items, if any, are provided separately by their respective manufacturers.

WOODS' obligation under this Warranty is limited to, at WOODS' option, the repair or replacement, free of charge, of the product if WOODS, in its sole discretion, deems it to be defective or in noncompliance with this Warranty. **The product must be returned to WOODS with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid.** WOODS shall complete such repair or replacement within a reasonable time after WOODS receives the product. THERE ARE NO OTHER REMEDIES UNDER THIS WARRANTY. THE REMEDY OF REPAIR OR REPLACEMENT IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS WARRANTY. WOODS MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND WOODS SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY AND/OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

WOODS shall not be liable for any incidental or consequential losses, damages or expenses, arising directly or indirectly from the product, whether such claim is based upon breach of contract, breach of warranty, negligence, strict liability in tort or any other legal theory. Without limiting the generality of the foregoing, Woods specifically disclaims any damages relating to (i) lost profits, business, revenues or goodwill; (ii) loss of crops; (iii) loss because of delay in harvesting; (iv) any expense or loss incurred for labor, supplies, substitute machinery or rental; or (v) any other type of damage to property or economic loss.

This Warranty is subject to any existing conditions of supply which may directly affect WOODS' ability to obtain materials or manufacture replacement parts.

No agent, representative, dealer, distributor, serviceperson, salesperson, or employee of any company, including without limitation, WOODS, its authorized dealers, distributors, and service centers, is authorized to alter, modify, or enlarge this Warranty.

Answers to any questions regarding warranty service and locations may be obtained by contacting:

Woods Equipment Company

2606 South Illinois Route 2
Post Office Box 1000
Oregon, Illinois 61061

800-319-6637 tel
800-399-6637 fax
www.WoodsEquipment.com

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BMP®
CENTRAL FABRICATORS®
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WAIN-ROY®
WOODS®

WARRANTY

(Replacement Parts For All Models Except Mow'n Machine™
Zero-Turn Mowers and Woods Boundary™ Utility Vehicles)

Woods Equipment Company ("WOODS") warrants this product to be free from defect in material and workmanship for a period of ninety (90) days from the date of delivery of the product to the original purchaser with the exception of V-belts, which will be free of defect in material and workmanship for a period of 12 months.

Under no circumstances will this Warranty apply in the event that the product, in the good faith opinion of WOODS, has been subjected to improper operation, improper maintenance, misuse, or an accident. This Warranty does not cover normal wear or tear, or normal maintenance items.

This Warranty is extended solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this Warranty does not transfer to the third party purchaser in any way. There are no third party beneficiaries of this Warranty.

WOODS' obligation under this Warranty is limited to, at WOODS' option, the repair or replacement, free of charge, of the product if WOODS, in its sole discretion, deems it to be defective or in noncompliance with this Warranty. **The product must be returned to WOODS with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid.** WOODS shall complete such repair or replacement within a reasonable time after WOODS receives the product. THERE ARE NO OTHER REMEDIES UNDER THIS WARRANTY. THE REMEDY OF REPAIR OR REPLACEMENT IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY.

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